

JRC SCIENTIFIC AND POLICY REPORTS

# The 2012 Annual Economic Report on the EU Fishing Fleet (STECF-12-10)

Scientific, Technical and Economic  
Committee for Fisheries (STECF)

Edited by  
John Anderson  
Natacha Carvalho  
Franca Contini  
Jarno Virtanen



This report was reviewed by the STECF during its' 40<sup>th</sup> plenary meeting  
held from 9 to 13 July 2012 in Copenhagen, Denmark

EUR 25452 EN - 2012

European Commission  
Joint Research Centre  
Institute for the Protection and Security of the Citizen

#### Contact information

STECF secretariat

Address: TP 051, 21027 Ispra (VA), Italy

E-mail: [stecf-secretariat@jrc.ec.europa.eu](mailto:stecf-secretariat@jrc.ec.europa.eu)

Tel.: 0039 0332 789343

Fax: 0039 0332 789658

<https://stecf.jrc.ec.europa.eu/home>

<http://ipsc.jrc.ec.europa.eu/>

<http://www.jrc.ec.europa.eu/>

#### Legal Notice

Neither the European Commission nor any person acting on behalf of the Commission is responsible for the use which might be made of this publication.

This report does not necessarily reflect the view of the European Commission and in no way anticipates the Commission's future policy in this area.

Europe Direct is a service to help you find answers to your questions about the European Union

Freephone number (\*): 00 800 6 7 8 9 10 11

(\*) Certain mobile telephone operators do not allow access to 00 800 numbers or these calls may be billed.

A great deal of additional information on the European Union is available on the Internet.

It can be accessed through the Europa server <http://europa.eu/>

JRC 73332

EUR 25452 EN

ISBN 978-92-79-25760-5

ISSN 1831-9424

doi: 10.2788/40549

Luxembourg: Publications Office of the European Union, 2012

© European Union, 2012

Reproduction is authorised provided the source is acknowledged

Printed in Italy

## TABLE OF CONTENTS

<b>THE 2012 ANNUAL ECONOMIC REPORT ON THE EU FISHING FLEET (STECF-12-10).....</b>	<b>13</b>
<b>STECF OBSERVATION.....</b>	<b>14</b>
<b>EXPERT WORKING GROUP REPORT .....</b>	<b>17</b>
<b>1 EXECUTIVE SUMMARY.....</b>	<b>18</b>
<b>2 INTRODUCTION.....</b>	<b>21</b>
2.1 TERMS OF REFERENCE FOR STECF EWG-12-05 .....	22
2.2 PARTICIPANTS AT EWG 12-05 .....	22
<b>3. EU FLEET OVERVIEW .....</b>	<b>23</b>
3.1 EU FLEET STRUCTURE .....	23
3.2 SOCIO-ECONOMIC STRUCTURE OF THE EU FLEET .....	24
3.3 EU FLEET FISHING ACTIVITY AND OUTPUT .....	25
3.4 EU FLEET ECONOMIC PERFORMANCE .....	28
3.5 EU FLEET ECONOMIC PERFORMANCE BY GEAR TYPE.....	33
3.6 ASSESSMENT FOR 2011 AND 2012.....	34
<b>4. REGIONAL ANALYSES.....</b>	<b>43</b>
4.1. BALTIC SEA.....	45
4.2 MEDITERRANEAN AND BLACK SEA.....	51
4.3 NORTH ATLANTIC .....	61
4.4 NORTH SEA AND EASTERN ARCTIC AREA .....	69
4.5 OTHER REGIONS.....	77
<b>5. NATIONAL CHAPTERS .....</b>	<b>83</b>
5.1 BELGIUM.....	85
5.2 BULGARIA .....	95
5.3 CYPRUS .....	105
5.4 DENMARK.....	115
5.5 ESTONIA.....	125
5.6 FINLAND .....	135
5.7 FRANCE .....	145
5.8 GERMANY.....	159
5.9 GREECE .....	171
5.10 IRELAND .....	173
5.11 ITALY .....	183
5.12 LATVIA .....	195
5.13 LITHUANIA.....	205
5.14 MALTA.....	215
5.15 NETHERLANDS.....	225
5.16 POLAND.....	235
5.17 PORTUGAL.....	245
5.18 ROMANIA.....	257
5.19 SLOVENIA.....	265
5.20 SPAIN .....	277
5.21 SWEDEN .....	285
5.22 UNITED KINGDOM .....	295
<b>6. EU SEAFOOD PRICE ANALYSIS .....</b>	<b>307</b>
6.1 INTRODUCTION.....	307
6.2 SEAFOOD PRICE TRENDS: EU OVERVIEW .....	307
6.3 REGIONAL PRICE TRENDS .....	315
6.4 PRICE TRENDS BY MEMBER STATE .....	319
6.5 CONCLUSIONS AND OUTLOOK.....	327
6.6 REFERENCES .....	329

<b>7.</b>	<b>ECONOMIC INDICATORS FOR ASSESSING BALANCE BETWEEN FLEET CAPACITY AND FISHING OPPORTUNITIES .....</b>	<b>331</b>
7.1	MAIN CONCLUSIONS AND RECOMMENDATIONS .....	331
7.2	INTRODUCTION.....	331
7.3	INDICATOR TARGET REFERENCE POINTS (TRPs) .....	332
7.4	RESULTS .....	333
7.5	CONCLUSIONS AND OBSERVATIONS .....	349
7.6	METHODOLOGY FOR ESTIMATION OF FOREGONE PROFITS (TAKEN FROM EWG 11-17) .....	352
7.7	METHODOLOGY FOR CALCULATING ECONOMIC AND SOCIAL BALANCE INDICATORS.....	356
<b>8.</b>	<b>SPECIAL CHAPTER ON FISHING RIGHTS.....</b>	<b>361</b>
8.1	INTRODUCTION.....	361
8.2	DESCRIPTION OF FISHING RIGHT BY MEMBER STATE .....	362
8.3	TOTAL VALUE OF FISHING RIGHTS: VALUE OF RESOURCES .....	365
8.4	TRADE OF FISHING RIGHTS: EFFICIENCY OF MARKET AND DISTRIBUTION OF PROFITS/RENTS .....	368
8.5	CONCLUSIONS .....	371
<b>9.</b>	<b>2012 AER REPORT METHODOLOGY.....</b>	<b>373</b>
9.1	INTRODUCTION.....	373
9.2	ECONOMIC PERFORMANCE INDICATOR CALCULATIONS.....	376
9.3	ECONOMIC PERFORMANCE PROJECTIONS .....	378
<b>10</b>	<b>EWG-12-05 LIST OF PARTICIPANTS.....</b>	<b>379</b>
<b>11</b>	<b>LIST OF BACKGROUND DOCUMENTS.....</b>	<b>380</b>

## LIST OF FIGURES

Figure 3.1 EU fishing fleet capacity trends: 2005-2010 .....	23
Figure 3.2 EU fleet employment and average wage indicators .....	24
Figure 3.3 EU fleet fishing effort indicators.....	26
Figure 3.4 EU fleet weight and value of landings trends.....	27
Figure 3.5 EU fleet average first sales price trends for key species .....	27
Figure 3.6 Income and cost type breakdown for the EU fleet in 2010 .....	28
Figure 3.7 Trends in main cost items of the EU fleet.....	28
Figure 3.8 EU fleet economic performance indicators 2008-2010.....	29
Figure 3.9 EU Member States economic performance indicators in 2010 .....	30
Figure 3.10 EU fleet net profit with and without direct income subsidies 2008-2010 .....	31
Figure 3.11 EU fleet economic performance – mobile and passive gears.....	33
Figure 3.12 EU fleet economic performance by mobile gear type .....	34
Figure 3.13 EU Member States fleet economic performance forecasts for 2011 .....	35
Figure 4.1.1 EU Baltic Sea fleet effort and landings by MS, gear type and length class in 2011 .....	45
Figure 4.2.1 EU Mediterranean and Black Sea fleet capacity and employment 2010.....	51
Figure 4.2.2 EU Mediterranean and Black Sea fleet effort and landings in 2010 .....	52
Figure 4.2.3 EU Med. and Black Sea fleet volume and value of top 8 species landed.....	53
Figure 4.3.1 EU North Atlantic fleet effort and landings in 2010 .....	61
Figure 4.4.1 EU North Sea and Eastern Arctic fleet effort and landings in 2010.....	69
Figure 4.4.2 EU North Sea and Eastern Arctic fleet volume and value landed of top 5 species .....	70
Figure 4.5.1. DCF for 2010 (weight of landings) and FAO (catches) 2010 data comparison. ....	77
Figure 4.5.2 EU ‘other regions’ effort and landings in 2010.....	78
Figure 4.5.3 EU ‘other regions’ catches by fishing areas in 2010 (according to FAO).....	79
Figure 5.1.1 Belgium national fleet capacity and employment trends: 2008-2012 .....	85
Figure 5.1.2 Belgium national fleet fishing effort (left) and landings trends (right):2008-2011 .....	86
Figure 5.1.3 Belgium national fleet total landings by key species in value (top) and weight (bottom), with corresponding weights and values:2008-2011 .....	87
Figure 5.1.4 Total average price (left) and turnover as a percentage of total value of landings (right) for the five key species landed by the Belgium national fleet: 2008-2011.....	88
Figure 5.1.5 Belgium national fishing fleet economic performance trends: 2008-2011 (variation 2010-2008).....	89
Figure 5.1.6 Key indicators for the average vessel in the Belgium TBB VL1824 fleet segment, 2008-2011:.....	92
Figure 5.1.7 Key indicators for the average vessel in the Belgium TBB VL2440 fleet segment 2008-2011:.....	93
Figure 5.2.1 Bulgaria national fleet capacity and employment trends: 2008-2012 (variation 2012-2008 for all except employment, variation 2010-2008) .....	95
Figure 5.2.2 Bulgaria national fleet fishing effort (left) and landings trends (right):2008-2011 (variation 2011-2008) .....	96
Figure 5.2.3 Bulgaria national fleet total landings by key species in value and weight:2008-2011 .....	97
Figure 5.2.4 Total average price (left) and turnover as a percentage of total value of landings (right) for the five key species landed by the Bulgaria national fleet: 2008-2011.....	97
Figure 5.2.5 Bulgaria national fishing fleet economic performance trends: 2008-2011.....	99

Figure 5.2.6 Key indicators for the average vessel in the Bulgaria PMP VL1218 fleet segment, 2008-2011:.....	101
Figure 5.2.7 Key indicators for the average vessel in the Bulgaria PMP VL1824 fleet segment, 2008-2011:.....	102
Figure 5.3.1 Cyprus national fleet capacity and employment trends: 2008-2012 .....	106
Figure 5.3.2 Cyprus national fleet fishing effort (left) and landings trends (right):2008-2011 .....	106
Figure 5.3.3 Cyprus national fleet total landings by key species in value (top) and weight (bottom), with corresponding weights and values:2008-2011 .....	107
Figure 5.3.4 Total average price (left) and turnover as a percentage of total value of landings (right) for the five key species landed by the Cyprus national fleet: 2008-2010 .....	107
Figure 5.3.5 Cyprus national fishing fleet economic performance trends: 2008-2010.....	109
Figure 5.3.6 Key indicators for the average vessel in the Cyprus PG VL0612 fleet segment, 2008-2010:.....	111
Figure 5.3.7 Key indicators for the average vessel in the Cyprus PGP VL1218 fleet segment, 2008-2010: .....	112
Figure 5.4.1 Denmark national fleet capacity and employment trends: 2008-2012 .....	116
Figure 5.4.2 Denmark national fleet fishing effort (left) and landings trends (right):2008-2011 .....	116
Figure 5.4.3 Denmark national fleet total landings by key species in value (left) and weight (right):2008-2011 .....	117
Figure 5.4.4 Total average price (left) and turnover as a percentage of total value of landings (right) for the five key species landed by the Denmark national fleet: 2008-2011 .....	117
Figure 5.4.5 Denmark national fishing fleet economic performance trends: 2008-2011 .....	119
Figure 5.4.6 Key indicators for the average vessel in the Denmark TBB VL1218 fleet segment 2008-2011:.....	121
Figure 5.4.7 Key indicators for the average vessel in the Denmark DTS VL1218 fleet segment 2008-2011: .....	122
Figure 5.5.1 Estonia national fleet capacity and employment trends: 2008-2012 .....	126
Figure 5.5.2 Estonia national fleet fishing effort (left) and landings trends (right):2008-2011 .....	126
Figure 5.5.3 Estonia national fleet total landings by key species in value (left) and weight (right):2008-2011.....	127
Figure 5.5.4 Total average price (left) and turnover as a percentage of total value of landings (right) for the five key species landed by the Estonian national fleet: 2008-2011 .....	127
Figure 5.5.5 Estonian national fishing fleet economic performance trends: 2008-2011 .....	129
Figure 5.5.6 Key indicators for the average vessel in the Estonia TM VL2440 fleet segment, 2008-2011: .....	131
Figure 5.5.7 Key indicators for the average vessel in the Estonia PG VL0010 fleet segment 2008-2011: .....	132
Figure 5.6.1 Finland national fleet capacity and employment trends: 2008-2012.....	136
Figure 5.6.2 Finland national fleet fishing effort (left) and landings trends (right):2008-2011.....	136
Figure 5.6.3 Finland national fleet total landings by key species in value (left) and weight (right):2008-2011 .....	137
Figure 5.6.4 Total average price (left) and turnover as a percentage of total value of landings (right) for the five key species landed by the Finland national fleet: 2008-2011 .....	137
Figure 5.6.5 Finland national fishing fleet economic performance trends: 2008-2011 .....	138
Figure 5.6.6 Key indicators for the average vessel in the Finland TM VL2440 fleet segment, 2008-2011: .....	142
Figure 5.6.7 Key indicators for the average vessel in the Finland PG VL0010 fleet segment 2008-2011: .....	143
Figure 5.7.1 France national fleet capacity and employment trends: 2008-2012 .....	146
Figure 5.7.2 France national fleet fishing effort (left) and landings trends (right):2008-2011 .....	147
Figure 5.7.3 France national fleet total landings by key species in value (top) and weight (bottom), with corresponding value and weights:2008-2011 .....	148
Figure 5.7.4 Total average price (left) and turnover as a percentage of total value of landings (right) for the five key species landed by the French national fleet: 2008-2011 .....	149
Figure 5.7.5 France national fishing fleet economic performance trends (variation 2010 to 2008): 2008-2011 .....	150
Figure 5.7.6 Key indicators for the average vessel in the France DRB VL1218 fleet segment, 2008-2011: .....	156
Figure 5.7.7 Key indicators for the average vessel in the France DTS VL40XX fleet segment 2008-2011: .....	157

Figure 5.8.1 German national fleet capacity and employment trends: 2008-2012 .....	160
Figure 5.8.2 German national fleet fishing effort (left) and landings trends (right):2008-2011 .....	161
Figure 5.8.3 German national fleet total landings by key species in value (top) and weight (bottom), with corresponding weights and values:2008-2011 .....	161
Figure 5.8.4 Total average price (left) and turnover as a percentage of total value of landings (right) for the five key species landed by the German national fleet: 2008-2011.....	162
Figure 5.8.5 German national fishing fleet economic performance trends: 2008-2011 .....	164
Figure 5.8.6 Key indicators for the average vessel in the German TBB VL1218 fleet segment, 2008-2011:.....	166
Figure 5.8.7 Key indicators for the average vessel in the German DTS VL40XX fleet segment 2008-2011: .....	167
Figure 5.10.1 Irish national fleet capacity and employment trends: 2008-2012.....	174
Figure 5.10.2 Irish national fleet fishing effort (left) and landings trends (right): 2008-2011 .....	174
Figure 5.10.3 Irish national fleet total landings by key species in value (top) and weight (bottom) and corresponding weight and value: 2008-2011 .....	175
Figure 5.10.4 Total average price (left) and turnover as a percentage of total value of landings (right) for the five key species landed by the Irish national fleet: 2008-2011.....	176
Figure 5.10.5 Irish national fishing fleet economic performance trends: 2008-2011 .....	177
Figure 5.10.6 Key indicators for the average vessel in the Irish TM VL40XX fleet segment, 2008-2012: .....	180
Figure 5.10.7 Key indicators for the average vessel in the Irish DTS VL1824 fleet segment 2008-2012: .....	181
Figure 5.11.1 Italian national fleet capacity and employment trends: 2008-2012.....	184
Figure 5.11.2 Italian national fleet fishing effort (left) and landings trends (right):2008-2010.....	185
Figure 5.11.3 Italian national fleet total landings by key species in value (top) and weight (bottom) and corresponding weight and value:2008-2010 .....	185
Figure 5.11.4 Total average price (left) and turnover as a percentage of total value of landings (right) for the five key species landed by the Italian national fleet: 2008-2011.....	186
Figure 5.11.5 Italian national fishing fleet economic performance trends: 2008-2011 .....	188
Figure 5.11.6 Key indicators for the average vessel in the Italian DTS VL1218 fleet segment, 2008-2011:.....	191
Figure 5.11.7 Key indicators for the average vessel in the Italian PGP VL0612 fleet segment 2008-2011:.....	192
Figure 5.12.1 Latvia national fleet capacity and employment trends: 2008-2012.....	196
Figure 5.12.2 Latvia national fleet fishing effort (left) and landings trends (right):2008-2011.....	196
Figure 5.12.3 Latvia national fleet total landings by key species in value (top) and weight (bottom):2008-2011 .....	197
Figure 5.12.4 Total average price (left) and turnover as a percentage of total value of landings (right) for the five key species landed by the Latvian national fleet: 2008-2011.....	197
Figure 5.12.5 Latvia national fishing fleet economic performance trends: 2008-2011 .....	198
Figure 5.12.6 Key indicators for the average vessel in the Latvia TM VL2440 fleet segment, 2008-2011: .....	201
Figure 5.12.7 Key indicators for the average vessel in the Latvia DFN VL2440 fleet segment 2008-2011: .....	202
Figure 5.13.1 Lithuanian national fleet capacity and employment trends: 2008-2011.....	206
Figure 5.13.2 Lithuanian national fleet fishing effort (left) and landings trends (right):2008-2011 .....	206
Figure 5.13.3 Lithuanian national fleet total landings by key species in value (left) and weight (right):2008-2011. ....	207
Figure 5.13.4 Total average price (left) and turnover as a percentage of total value of landings (right) for the five key species landed by the Lithuanian national fleet: 2008-2011.....	208
Figure 5.13.5 Lithuanian national fishing fleet economic performance trends: 2008-2011 .....	210
Figure 5.13.6 Key indicators for the average vessel in the Lithuanian DTS VL2440 fleet segment, 2008-2011: .....	212
Figure 5.13.7 Key indicators for the average vessel in the Lithuanian DFN VL0010 fleet segment 2008-2011: .....	213
Figure 5.14.1 Maltese national fleet capacity and employment trends: 2008-2012 .....	216

Figure 5.14.2 Maltese national fleet fishing effort (left) and landings trends (right):2008-2011 .....	216
Figure 5.14.3 Maltese national fleet total landings by key species in value (top) and weight (bottom):2008-2011 .....	217
Figure 5.14.4 Total average price (left) and turnover as a percentage of total value of landings (right) for the five key species landed by the Maltese national fleet: 2008-2011 .....	218
Figure 5.14.5 Maltese national fishing fleet economic performance trends: 2008-2011 .....	220
Figure 5.14.6 Key indicators for the average vessel in the Maltese DTS VL1824 fleet segment, 2008-2011: .....	222
Figure 5.14.7 Key indicators for the average vessel in the Maltese PMP VL0612 fleet segment, 2008-2011:.....	223
Figure 5.15.1 Dutch national fleet capacity and employment trends: 2008-2012 .....	226
Figure 5.15.2 Dutch national fleet fishing effort (left) and landings trends (right):2008-2011 .....	226
Figure 5.15.3 Dutch national fleet total landings by key species in value (top) and weight (bottom):2008-2011 .....	227
Figure 5.15.4 Total average price (left) and turnover as a percentage of total value of landings (right) for the five key species landed by the Dutch national fleet: 2008-2011 .....	229
Figure 5.15.5 Dutch national fishing fleet economic performance trends: 2008-2011.....	229
Figure 5.15.6 Key indicators for the average vessel in the Dutch TBB VL1218 fleet segment, 2008-2011:.....	231
Figure 5.15.7 Key indicators for the average vessel in the Dutch TM VL40XX fleet segment 2008-2011:.....	232
Figure 5.16.1 Polish national fleet capacity and employment trends: 2008-2012 .....	236
Figure 5.16.2 Polish national fleet fishing effort (left) and landings trends (right):2008-2011 .....	236
Figure 5.16.3 Polish national fleet total landings by key species in value (left) and weight (right):2008-2011.....	237
Figure 5.16.4 Total average price (left) and turnover as a percentage of total value of landings (right) for the five key species landed by the Polish national fleet: 2008-2011 .....	239
Figure 5.16.5 Polish national fishing fleet economic performance trends: 2008-2011 .....	239
Figure 5.16.6 Key indicators for the average vessel in the Polish DTS VL1824 fleet segment, 2008-2011:.....	241
Figure 5.16.7 Key indicators for the average vessel in the Polish PMP VL0612 fleet segment 2008-2011: .....	242
Figure 5.17.1 Portuguese national fleet capacity and employment trends: 2008-2012 .....	246
Figure 5.17.2 Portuguese national fleet fishing effort (left) and landings trends (right):2008-2011 .....	246
Figure 5.17.3 Portuguese national fleet total landings by key species in terms of value (top) and weight (bottom), with corresponding weights and values:2008-2011.....	247
Figure 5.17.4 Total average price (left) and turnover as a percentage of total value of landings (right) for the five key species landed by the Portuguese national fleet: 2008-2011 .....	248
Figure 5.17.5 Portuguese national fishing fleet economic performance trends: 2008-2011.....	249
Figure 5.17.6 Key indicators for the average vessel in the Portuguese DTS VL2440 fleet segment, 2008-2011:.....	253
Figure 5.17.7 Key indicators for the average vessel in the Portuguese PS VL1824 fleet segment 2008-2011: .....	254
Figure 5.18.1 Romania national fleet capacity and employment trends: 2008-2012.....	258
Figure 5.18.2 Romania national fleet fishing effort (left) and landings trends (right):2008-2011 .....	258
Figure 5.18.3 Romania national fleet total landings by key species in value (left) and weight (right):2008-2011 .....	259
Figure 5.18.4 Total average price (left) and turnover as a percentage of total value of landings (right) for the five key species landed by the Romania national fleet: 2008-2011.....	259
Figure 5.18.5 Romania national fishing fleet economic performance trends: 2008-2011 .....	261
Figure 5.18.6 Key indicators for the average vessel in the Romanian PG VL0612 fleet segment, 2008-2011:.....	262
Figure 5.18.7 Key indicators for the average vessel in the Romanian PMP VL0612 fleet segment, 2008-2011:.....	263
Figure 5.19.1 Slovenian national fleet capacity and employment trends: 2008-2012 .....	266
Figure 5.19.2 Slovenian national fleet fishing effort (left) and landings trends (right):2008-2011 .....	266
Figure 5.19.3 Slovenian national fleet total landings by key species in value (top) and weight (bottom):2008-2011 .....	267



Figure 5.19.4 Total average price (left) and turnover as a percentage of total value of landings (right) for the five key species landed by the Slovenian national fleet: 2008-2011 .....	268
Figure 5.19.5 Slovenian national fishing fleet economic performance trends: 2008-2011 .....	270
Figure 5.19.6 Key indicators for the average vessel in the Slovenian DFN VL0612 fleet segment, 2008-2011: .....	272
Figure 5.19.7 Key indicators for the average vessel in the Slovenian TM VL2440 fleet segment 2008-2011: .....	273
Figure 5.20.1 Spain national fleet employment trends: 2008-2010.....	277
Figure 5.20.2 Spain national fleet fuel consumption trends (right):2008-2010.....	278
Figure 5.20.3 Spain national fishing fleet economic performance trends: 2008-2011 .....	279
Figure 5.20.4 Key indicators for the average vessel in the Spanish DTS VL2440 fleet segment operating in Area 27, 2008-2010:.....	282
Figure 5.20.5 Key indicators for the average vessel in the Spanish PS VL2440 fleet segment operating in Area 27, 2008-2010:.....	283
Figure 5.21.1 Swedish national fleet capacity and employment trends: 2008-2012.....	286
Figure 5.21.2 Swedish national fleet fishing effort (left) and landings trends (right):2008-2011 .....	286
Figure 5.21.3 Swedish national fleet total landings by key species in value (top) and weight (bottom):2008-2011.....	287
Figure 5.21.4 Total average price (left) and turnover as a percentage of total value of landings (right) for the five key species landed by the Swedish national fleet: 2008-2011 .....	289
Figure 5.21.5 Swedish national fishing fleet economic performance trends: 2008-2011 .....	289
Figure 5.21.6 Key indicators for the average vessel in the Swedish TM VL40XX fleet segment, 2008-2011: .....	291
Figure 5.21.7 Key indicators for the average vessel in the Swedish DTS VL2440 fleet segment 2008-2011: .....	292
Figure 5.22.1 UK national fleet capacity and employment trends: 2008-2012 .....	296
Figure 5.22.2 UK national fleet fishing effort (left) and landings trends (right):2008-2011 .....	296
Figure 5.22.3 UK national fleet total landings by key species in value (top) and weight (bottom), with corresponding value and weights:2008-2011 .....	297
Figure 5.22.4 Total average price (left) and turnover as a percentage of total value of landings (right) for the five key species landed by the UK national fleet: 2008-2011 .....	297
Figure 5.22.5 UK national fishing fleet economic performance trends: 2008-2011.....	298
Figure 5.22.6 Key indicators for the average vessel in the UK TBB VL2440 fleet segment, 2008-2011:.....	303
Figure 5.22.7 Key indicators for the average vessel in the UK DTS VL2440 fleet segment 2008-2011: .....	304
Figure 6.1 Top 10 species in terms of landings value (top) and weight (bottom), and their corresponding weights and values: 2008-2010. ....	309
Figure 6.2 Top 10 species as percentage share of total landings in value (top) and weight (bottom): 2008 – 2010 .....	310
Figure 6.3 Average real price of top 10 species in terms of landings value (left) and weight (right) 2008-2010 .....	311
Figure 6.4 Top ten species in terms of first-sale price (left) and other key species (right): 2008-2010 .....	311
Figure 6.5 Total landings in value and weight by main species groups: 2008-2010. ....	312
Figure 6.6 Average landing real price by main species groups: 2008-2011.....	312
Figure 6.7 Average real landed price (€/Kg) by main fishing gear: 2008-2010. ....	313
Figure 6.8 Average real landed price by fishing gear: 2008-2010.....	314
Figure 6.9 Average real landed price by vessel length 2008-2010.....	314
Figure 6.10 Average landed real price by region: 2008-2010 .....	315
Figure 6.11 Average landed price of the top 5 species in terms of landed value by fishing region: 2008-2010 .....	316
Figure 6.12 Average landed real price by region and fishing gear (main gear type): 2008-2010 .....	317
Figure 6.13 Average landed real price by region and vessel length: 2008-2010.....	318
Figure 6.14 Average landed real price by Member States: 2008 – 2010.....	319

Figure 6.15 Average price trends (€/kg) of the top 5 species in terms of total landings value by Member State.....	319
Figure 6.16 Average price trends (€/kg) by fishing gear by Member State.....	322
Figure 6.17 Average price trends (€/kg) by vessel length by Member State.....	325
Figure 7.1: Profits (as % of income) foregone from fleet technical under-utilisation in 2010 .....	337
Figure 7.2: Return of fixed tangible assets (ROFTA) 2008-2010 .....	342
Figure 7.3: Current Revenue to Break-even revenue ratio (CR/BER) 2008-2010 .....	343
Figure 7.4: Average crew wage per FTE (2008-2010).....	345
Figure 7.5 Gross Value Added (GVA) as % of Income (2008-2010) .....	348
Figure 8.1 Value of fishing rights for UK, Denmark and the Netherlands 2008-2010.....	365
Figure 8.2 Danish net profit as a proportion of the value of fishing rights by fleet segment i.e. return on fishing rights (EPL_pr) and value of fishing rights to value of tangible assets ratios by fleet (DRD) .....	366
Figure 8.3 Estonian net profit as a proportion of the value of fishing rights by fleet segment i.e. return on fishing rights (EPL_pr) and value of fishing rights to value of tangible assets ratios by fleet (DRD) .....	366
Figure 8.4 The Dutch net profit as a proportion of the value of fishing rights by fleet segment i.e. return on fishing rights (EPL_pr) and value of fishing rights to value of tangible assets ratios by fleet (DRD) .....	367
Figure 8.5 UK value of fishing rights to value of tangible assets ratios by fleet segment.....	367
Figure 8.6 The volume of the trade in fishing rights .....	368
Figure 8.7 Profitability on the net income of fishing rights.....	369

## LIST OF TABLES

Table 3.1 Main indicator totals for EU Member States fishing fleets in 2010 .....	32
Table 4.1.1 EU Baltic Sea fleet economic performance by Member State in 2010.....	48
Table 4.1.2 EU Baltic Sea fleet economic performance by gear type in 2010 .....	48
Table 4.1.3 EU Baltic Sea fleet economic performance by fleet segment in 2010.....	49
Table 4.2.1 EU Med. & Black Sea economic performance fleet by MS in 2010 .....	56
Table 4.2.2 EU Med. & Black Sea economic performance fleet by gear type in 2010 .....	56
Table 4.2.3 EU Med. & Black Sea economic performance fleet by fleet segment in 2010.....	57
Table 4.3.1 EU North Atlantic fleet economic performance by MS in 2010 .....	64
Table 4.3.2 EU North Atlantic fleet economic performance by gear type in 2010 .....	64
Table 4.3.3 EU North Atlantic fleet economic performance by MS in 2010 .....	65
Table 4.4.1 EU North Sea and Eastern Arctic fleet economic performance by Member State in 2010 .....	73
Table 4.4.2 EU North Sea and Eastern Arctic fleet economic performance by gear type in 2010 .....	73
Table 4.4.3 EU North Sea and Eastern Arctic fleet economic performance by fleet segment in 2010 .....	74
Table 4.5.1 EU ‘other regions’ fleet economic performance by MS in 2010.....	80
Table 4.5.2 EU ‘other regions’ fleet economic performance by gear type in 2010.....	80
Table 4.5.3 EU ‘other regions’ fleet economic performance by segment in 2010 .....	81
Table 5.1.1 Belgium national fishing fleet key indicators: 2008-2012.....	85
Table 5.1.2 Belgium national fishing fleet economic performance indicators: 2008-2011.....	90
Table 5.1.3 Belgium national fishing fleet composition and key indicators at fleet segment level for 2010 .....	91
Table 5.2.1 Bulgaria national fishing fleet key indicators: 2008-2012.....	95
Table 5.2.2 Bulgaria national fishing fleet economic performance indicators: 2008-2011.....	98
Table 5.2.3 Bulgaria national fishing fleet composition and key indicators at fleet segment level for 2010 .....	100
Table 5.3.1 Cyprus national fishing fleet key indicators: 2008-2012.....	105
Table 5.3.2 Cyprus national fishing fleet economic performance indicators: 2008-2011.....	108
Table 5.3.3 Cyprus national fishing fleet composition and key indicators at fleet segment level for 2010 .....	110
Table 5.4.1 Denmark national fishing fleet key indicators: 2008-2012.....	115
Table 5.4.2 Denmark national fishing fleet economic performance indicators: 2008-2011.....	118
Table 5.4.3 Denmark national fishing fleet composition and key indicators at fleet segment level for 2010 .....	120
Table 5.5.1 Estonia national fishing fleet key indicators: 2008-2012 .....	125
Table 5.5.2 Estonia national fishing fleet economic performance indicators: 2008-2011.....	128
Table 5.5.3 Estonia national fishing fleet composition and key indicators at fleet segment level for 2010 .....	130
Table 5.6.1 Finnish fishing fleet key indicators: 2008-2012 .....	135
Table 5.6.2 Finland national fishing fleet economic performance indicators: 2008-2011.....	139
Table 5.6.3 Finland national fishing fleet composition and key indicators at fleet segment level for 2010.....	141
Table 5.7.1 France national fishing fleet key indicators: 2008-2012.....	145
Table 5.7.2 France national fishing fleet economic performance indicators: 2008-2011.....	150
Table 5.7.3 France national fishing fleet composition and key indicators at fleet segment level for 2010 .....	153
Table 5.8.1 German national fishing fleet key indicators: 2008-2012.....	159

Table 5.8.2 German national fishing fleet economic performance indicators: 2008-2011.....	163
Table 5.8.3 German national fishing fleet composition and key indicators at fleet segment level for 2010 .....	165
Table 5.10.1 Irish national fishing fleet key indicators: 2008-2012 .....	173
Table 5.10.2 Irish national fishing fleet economic performance indicators: 2008-2011. ....	177
Table 5.10.3 Irish national fishing fleet composition and key indicators at fleet segment level for 2010.....	179
Table 5.11.1 Italian national fishing fleet key indicators: 2008-2012 .....	183
Table 5.11.2 Italian national fishing fleet economic performance indicators: 2008-2011.....	187
Table 5.11.3 Italian national fishing fleet composition and key indicators at fleet segment level for 2010.....	190
Table 5.12.1 Latvia national fishing fleet key indicators: 2008-2012 .....	195
Table 5.12.2 Latvia national fishing fleet economic performance indicators: 2008-2011.....	199
Table 5.12.3 Latvia national fishing fleet composition and key indicators at fleet segment level for 2010.....	200
Table 5.13.1 Lithuanian national fishing fleet key indicators: 2008-2012 .....	205
Table 5.13.2 Lithuanian national fishing fleet economic performance indicators: 2008-2011. ....	209
Table 5.13.3 Lithuanian national fishing fleet composition and key indicators at fleet segment level for 2010.....	211
Table 5.14.1 Maltese national fishing fleet key indicators: 2008-2012.....	215
Table 5.14.2 Maltese national fishing fleet economic performance indicators: 2008-2011.....	219
Table 5.14.3 Maltese national fishing fleet composition and key indicators at fleet segment level for 2010 .....	221
Table 5.15.1 Dutch national fishing fleet key indicators: 2008-2012.....	225
Table 5.15.2 Dutch national fishing fleet economic performance indicators: 2008-2011.....	228
Table 5.15.3 Dutch national fishing fleet composition and key indicators at fleet segment level for 2010 .....	230
Table 5.16.1 Polish national fishing fleet key indicators: 2008-2012 .....	235
Table 5.16.2 Polish national fishing fleet economic performance indicators: 2008-2011.....	238
Table 5.16.3 Polish national fishing fleet composition and key indicators at fleet segment level for 2010 .....	240
Table 5.17.1 Portuguese national fishing fleet key indicators: 2008-2012.....	245
Table 5.17.2 Portuguese national fishing fleet economic performance indicators: 2008-2011.....	249
Table 5.18.1 Romania national fishing fleet key indicators: 2008-2012 .....	257
Table 5.18.2 Romania national fishing fleet economic performance indicators: 2008-2011. ....	260
Table 5.18.3 Romania national fishing fleet composition and key indicators at fleet segment level for 2010.....	261
Table 5.19.1 Slovenian national fishing fleet key indicators: 2008-2012.....	265
Table 5.19.2 Slovenian national fishing fleet economic performance indicators: 2008-2011.....	269
Table 5.19.3 Slovenian national fishing fleet composition and key indicators at fleet segment level for 2010 .....	271
Table 5.20.1 Spain national fishing fleet key indicators: 2008-2012 .....	277
Table 5.20.2 Spain national fishing fleet economic performance indicators: 2008-2011.....	279
Table 5.20.3 Spain national fishing fleet composition and key indicators at fleet segment level for 2010.....	281
Table 5.21.1 Swedish national fishing fleet key indicators: 2008-2012.....	285
Table 5.21.2 Swedish national fishing fleet economic performance indicators: 2008-2011. ....	288
Table 5.21.3 Swedish national fishing fleet composition and key indicators at fleet segment level for 2010.....	290
Table 5.22.1 UK national fishing fleet key indicators: 2008-2012.....	295
Table 5.22.2 UK national fishing fleet economic performance indicators: 2008-2011.....	299
Table 5.22.3 UK national fishing fleet composition and key indicators at fleet segment level for 2010 .....	301
Table 6.1 Common name, scientific name and FAO code and main species group of the key species analysed.....	308

Table 7.1: Target reference points for foregone profits and balance indicators .....	332
Table 7.2: Forgone profits and balance indicator results by fleet segment of special interest.....	334
Table 7.3 Example estimation of profit achieved by fleet with excess capacity and potential profit that could be achieved by a smaller fleet .....	354
Table 8.1 Rights distribution in the Estonian fishing fleet .....	370
Table 9.1 AER 2012 Fleet economic data call contents for years 2008-2012.....	374
Table 9.2 Inflations and nominal LT interest rates by EU Member State 2008-2010 .....	377



## **SCIENTIFIC, TECHNICAL AND ECONOMIC COMMITTEE FOR FISHERIES (STECF)**

### **THE 2012 ANNUAL ECONOMIC REPORT ON THE EU FISHING FLEET (STECF-12-10)**

**THIS REPORT WAS REVIEWED DURING THE PLENARY MEETING HELD IN COPENHAGEN 9-13 JULY 2012**

#### **Request to the STECF**

STECF is requested to review the report of the STECF EWG-12-05 held from 4 – 8 June 2012 in Ispra, evaluate the findings and make any appropriate comments and recommendations.

#### **Background**

Following STECF recommendations in 2011, two EWG meetings are convened to produce the AER in 2012 (EWG 12-03 & EWG 12-05). EWG 12-03 was focused on reviewing submitted data. EWG 12-05 was dedicated to analysis, discussions and drafting the report for approval at the STECF summer plenary (PLEN 12-02).

#### **Introduction**

STECF reviewed the AER report against the Terms of Reference.

In particular, the working group is asked to:

- 1) Assess status of final national level analyses; identify any outstanding issues and implications for other analyses within the AER. Feed results back to plenary.
- 2) Assess the fish price analysis; check the quality and completeness of the data contained within the analysis and ensure the accompanying text reflects the data available. In a subgroup, add qualitative interpretations of the data and identify the main issues affecting fish prices. Feed results back to plenary.
- 3) Assess all regional level analyses; check the quality and completeness of the data contained within the analyses and ensure the accompanying text reflects the data available. Within subgroups, add qualitative interpretations of the regional analyses and identify the main issues affecting the economic performance of the fleets at regional level. Feed results back to plenary.
- 4) Assess the EU level analysis; check the quality and completeness of the data contained within the analyses and ensure the accompanying text reflects the data available. Within

plenary, add qualitative interpretations and identify the main issues affecting the economic performance of the fleet at EU level.

- 5) Assess the data outputs from the special chapter on fishing rights trade; check the quality and completeness of the data contained within the analyses and ensure the provision of an accompanying text that reflects the data available. To be done in subgroup consisting of experts from MS who have tradable rights, results reported to plenary.
- 6) Assess the data outputs from the special chapter on overcapacity indicators; check the quality and completeness of the data contained within the analyses and ensure the provision of an accompanying text that reflects the data available. Provide an overall assessment of the usefulness and suitability of the approach to calculate forgone profits in relation to fleet overcapacity.
- 7) Assess the information provided by MS on financial position data and decide what analyses can be carried out with the data and information available.

## **STECF OBSERVATION**

STECF endorses the 2012 Annual Economic Report on the EU fishing fleet and its findings, which are summarised in the executive summary of the report. STECF acknowledges the efforts undertaken by the EWG, the chair and JRC in order to prepare the report before the summer plenary.

STECF recommends that the AER 2012 is published as quickly as possible and that the data the report is based on is published on the STECF website in a user friendly format.

STECF notes that none of the data requested under the 2012 DCF Economic data call were submitted by Greece and that the data submission from Spain was incomplete. Furthermore preparation of the 2012 AER 2012 could have been more efficiently undertaken if Member States had submitted quality-checked data at an earlier stage.

The AER 2012 consists of six chapters, two of which address specific topics requested by the Commission. The 2012 AER covers economic data for the years 2008, 2009 and 2010 collected under the Data Collection Framework. Furthermore, capacity indicators for 2011/2012 are also presented.

Chapter 3 provides an informative general overview of the structure and economic performance of EU fishing fleets. Due to the size of the AER 2012, STECF considers that a summary of the key findings and tables from the EU overview section would prove useful.

Chapter 4 gives a regional overview, which contrary to the EU overview, divides the analysis into five overall regions (Baltic Sea, Mediterranean and Black Sea, North Atlantic, North Sea and Eastern Arctic Area and other regions). Given that fishing opportunities and conditions vary from region to region, the chapter provides more detailed insights into economic performance of fishing fleets within the five regions.

Chapter 5 considers the economic performance of the national fishing fleets of each EU Member State, excluding Greece and only partial coverage for Spain. Given that the economic data are only available until 2010, the national experts have given a qualitative summary of the expected development in economic performance in 2011 and 2012.

Chapter 6 investigates levels and developments in first-sale prices for the species landed by the EU fishing fleets. The analysis is very detailed with huge amounts of information at national, species, area, fleet, and gear level. Investigation of price levels give valuable insights into the price obtained



at various levels of aggregation, while the price developments are an important explanation with respect to the development in economic performance of EU fishing fleets.

In response to a specific request from the Commission, Chapter 7 addresses the utility of a number of economic indicators for assessing balance between fleet capacity and fishing opportunities. As recommended by STECF in PLEN-11-03, calculation of the foregone profit was undertaken for selected fleets from each member state. STECF considers the exercise a useful investigation into the utility of this indicator in addition to those that are already used in assessing the balance between fishing capacity and fishing opportunities. However STECF wishes to stress that the results presented in Chapter 7 should not be used in isolation and further work needs to be carried out to determine whether the indicator of foregone profit gives any extra value compared to the indicators already calculated. STECF therefore proposes that the EWG-12-11 'Balance fishing capacity-opportunity' be requested to undertake further analysis of this issue with respect to comparing the foregone profit indicator with technical indicators and also considers the methodological implications of combining technical data with economic data.

Chapter 8 was also specifically requested by the Commission and reports the results of an analysis of the value and trade of fishing rights in various Member States. Given the increased use of fishing rights in EU Member States, the chapter gives valuable insights into the complexities of these systems and the plausible economic value of such rights. STECF notes that the analysis is only based on information about costs and revenues from leasing of fishing rights and does not incorporate any information relating to permanent trading of rights. STECF notes that for a variety of reasons, Chapter 6 does not give a comprehensive evaluation of management systems using fishing rights.

In accordance with the advice of the STECF and in agreement with DGMARE, ToR 7 was not addressed by the EWG 12-03 and instead, will be addressed by PGEcon.

In relation to the future production of the AER, STECF recommends the following:

- 1) The preparation of the AER is undertaken by having two separate EWG meetings, one for data quality checks and the writing of national reports and a second for regional analysis and the chapters of special interest,
- 2) The development and application of a data validation tool by JRC is undertaken in order to enable more initial data checks in order to verify the quality of the submitted data,
- 3) The regional overview is enhanced with more qualitative cross country comparison of economic performance of fleets,
- 4) The structure of the chapter on prices is revised in order to give a clear and concise overview of the price developments.



**EXPERT WORKING GROUP REPORT**

**REPORT TO THE STECF**

**EXPERT WORKING GROUP OF THE 2012 ANNUAL ECONOMIC  
REPORT ON THE EU FISHING FLEET  
(EWG-12-05)**

**ISPRA, ITALY, 4-8 JUNE 2012**

This report does not necessarily reflect the view of the STECF and the European Commission and in no way anticipates the Commission's future policy in this area.

## 1 EXECUTIVE SUMMARY

The 2012 Annual Economic Report (AER) on the European Union (EU) fishing fleet provides a comprehensive overview of the latest information available on the structure and economic performance of EU Member States fishing fleets. The results indicate that the EU fishing fleet moved from a loss making position to a post a profit in 2010. On the whole, the EU fleet showed improvements in the economic performance indicators analysed: GVA was estimated at €3.4 billion, an increase of 5.7% from 2009; gross profit was €1.2 billion, a 39.5% increase from 2009 and net profit was €288 million, an increase of over €300 million from 2009 (all excluding subsidies). Forecast figures also suggest improved economic performance for 2011 for around three quarters of the national fleets analysed, yet in the current economic situation, the future of many EU fleets remains uncertain.

This year's publication includes: (1) an economic and structural overview of the EU fishing fleet; (2) a detailed economic and structural overview of the fishing fleets from each EU Member State; (3) qualitative economic performance assessments for 2011 and 2012 for each EU Member State; (4) detailed economic and structural analyses of Member States key fleet segments; (5) regional analyses of the EU fishing fleet; (6) EU fish prices analysis; (7) economic indicators for assessing balance between fleet capacity and fishing opportunities and (8) analyses of DCF data relating to fishing rights.

The total number of vessels in the EU fishing fleet in 2010 was 83,796, with a combined gross tonnage (GT) of 1.75 million tonnes and total engine power of 6.47 million kilowatts (kW). The overall capacity of the EU fleet decreased between 2005 and 2010 (vessels: -5.3%, GT: -13.0% and kW: -10.5%). The total number of fishers employed in the EU fishing fleet (excluding Greece) in 2010 was 138,500, an increase of around 2.4% when compared to 2009 figures. Spain had the highest level of employment, followed by Italy and then Portugal. Average crew wages decreased by 10% in 2010 and appear to fluctuate in line with fuel costs in recent years. In 2010 the Belgian fishing fleet paid the highest wages per FTE, followed by the Danish fleet, and then the French fleet. Total fuel consumption by the EU fleet was just under 2.5 billion litres in 2010, a 6% decrease compared to 2009. The Spanish fleet consumed the most fuel, with 29% of total consumption, followed by the Italian fleet and then the French fleet (Greece excluded).

The total weight and corresponding value of all fish landed by the EU fishing fleet (excluding Greece) in 2010 was 4.4 million tonnes and €6 billion respectively. Following a peak in weight and value terms in 2007 and then subsequent decreases in 2008 and 2009, there was a slight increase in both the weight and value landed between 2009 and 2010, of 2% and 1.2%, respectively. The Danish fleet landed the most in terms of weight in 2010 with 24% of the total landed in the EU, followed by the Spanish fleet (17%) and then the UK fleet (11%). In 2010 the Spanish generated the highest value for their catch (31% of the total), followed by Italy (19%) and then the UK (12%).

Herring achieved the highest volume of landings by the covered EU fleet in 2010, having narrowly overtaken sprat. The total weight of herring landed in 2010 was 505 thousand tonnes, a decrease of 0.8% compared to 2009, while the total weight of sprat landed was 471 thousand tonnes in 2010, a decrease of around 11% from 2010. Norway lobster achieved the highest value of landings, having overtaken common sole. The total value of landings of Norway lobster in 2010 was €302 million, an increase of 2.7% from 2009, while the total value of common sole landed was €300 million in 2010, an increase of around 1.1% from 2009. Average first-sale prices increased in 2010. The average price of landings in all MS analysed increased 6.3% from 2009 to 2010. In general the Mediterranean countries (Cyprus, followed by Italy and then Malta) obtained the highest prices.

The total amount of income generated by the EU fishing fleet (excluding Greece) in 2010 was €7 billion. This amount consisted of €6.6 billion in fish sales, €34 million in fishing rights rental income, €193 million in non-fishing income, and €126 million in direct income subsidies. Total income increased 2.6% between 2009 and 2010.

Total costs amounted to €6.5 billion, consisting of just under €1.9 billion in crew wages, €1.3 billion in fuel costs, €576 million in repair costs, €943 million in other variable costs, €614 million in fixed costs, €64 million in fishing rights leasing costs, €278 million in unpaid labour, €793 million in depreciation and €141 million in calculated opportunity costs (interest). As fuel prices eased in 2009, expenditure on crew wages and repairs consequently increased (15% and 12% respectively), while the total fuel cost of the EU fleet fell significantly (-23%), both in real terms and in relation to total income. Data for 2010 suggests a reverse in this trend, with a 7% reduction in the amount spent on crew wages compared to 2009 and a 11% increase in the amount of expenditure on fuel compared to 2009, largely due to the steady increase in fuel prices during 2010.

The EU fleet moved from a overall loss making position to post a profit in 2010. The total amount of Gross Value Added (GVA), Gross profit and Net profit (all excluding subsidies) generated by the EU fishing fleet (excluding Greece) in 2010 was €3.4 billion (a 5.7% increase from 2009), €1.2 billion (a 39.5% increase from 2009) and €288 million (an increase of over €300 million from 2009) respectively. GVA as a proportion of total income increased steadily from 42% in 2008 to 47% in 2009 to 49% in 2010. Gross profit as a proportion of total income increased from 12% in 2008 to 13% in 2009 to 18% in 2010. Net profit as a proportion of total income increased from negative 0.4% in 2009 to 4% in 2010. When we include direct income subsidies in the profit equation, the Net profit position increases, from €288 million to €414 million, while the EU fleet moved from an overall loss making position to a profitable position in 2009, from €-23 million to €151 million.

In 2011 total fleet income increased in 10 out of the 13 Member States who provided data. Economic performance projections suggest that GVA as a proportion of total income increased in 7 out of 12 Member States while gross and net profits as a proportion of total income increased in 8 out of 12 Member States. Therefore, improved economic performance is expected in 2011 for around three quarters of the national fleets analysed. Fuel price steadily increased in 2010, a trend which has continued into 2012. Higher fuel prices reduce the profitability of the fleet, particularly for fuel intensive fishing gears such as beam, demersal and pelagic trawl.

Analysis of economic performance by Member State reveals a mixed picture. Eleven out of 21 Member States generated a net profit in 2010, compared to 12 out of 21 in 2009. Only 4 Member States produced a negative gross profit in 2010, compared to 5 in 2009. The Spanish fleet generated the highest GVA in absolute terms in 2010 (22% of the EU total). The Danish fleet generated the highest level of GVA in relation to total income (66% of the total income). The Italian fleet generated the highest gross profit in absolute terms in 2010 (27% of the EU total). The Latvian fleet generated the highest level of gross profit in relation to total income (38% of the total income). The UK fleet generated the highest net profit in absolute terms in 2010 (42% of the EU total). The Danish fleet generated the highest level of Net profit in relation to total income (15% of the total income).

Between 2008 and 2010 the passive gear segments were generally more profitable than the mobile gear segments. GVA, gross profit and net profit as a proportion of total income were consistently higher for passive gears over the time period. GVA as a proportion of income varied between 52-57% for the passive gears, compared to 39-46% for the mobile gears. Gross profit fluctuated between 17-22% for passive gears, while mobile gears fluctuated between 11-19%. The passive gears made net profits between 2008-2010, while the mobile gears made net losses in 2008 and 2009.

The data also suggest that 36% of mobile gear fleet segments made losses in 2010 i.e. vessels in these segments on average made insufficient returns on capital invested. The corresponding figure for 2008 was 47%. In addition, 14% of mobile gear fleet segments generated negative gross profits on average in 2010, i.e. vessels in these segments on average did not generate enough income to cover operational costs. The corresponding figure for 2008 was 17%. In comparison, 39% of passive gear fleet segments made losses on average in 2010, compared to 41% in 2008, while 26% of static gear fleet segments generated negative gross profits in 2010, compared to 24% in 2008. Data for all mobile gear types show an improvement in economic performance from 2009 to 2010. Gross profit as a % of income from the beam trawlers is consistently around 15% over the period analysed, while net profit as a % of income increased from 4% in 2009 to 7% in 2010.

## 2 INTRODUCTION

The 2012 Annual Economic Report (AER) on the European Union (EU) fishing fleet provides a comprehensive overview of the latest information available on the structure and economic performance of EU Member States fishing fleets.

This publication includes:

- 1) An economic and structural overview of the EU fishing fleet
- 2) A detailed economic and structural overview of the fishing fleets from each EU Member State
- 3) Qualitative economic performance assessments for 2011 and 2012 for each EU Member State
- 4) Detailed economic and structural analyses of Member States key fleet segments
- 5) Regional analyses of the EU fishing fleet
- 6) The latest information on EU fish prices and price trends
- 7) Analyses of DCF data relating to fishing rights
- 8) Economic indicators for assessing balance between fleet capacity and fishing opportunities

The report has been produced by two working groups of economic experts (expert working group 12-03 and 12-05) convened under the Scientific, Technical and Economic Committee for Fisheries (STECF), which took place from the 26<sup>th</sup> to 30<sup>th</sup> of March and the 4<sup>th</sup> to 8<sup>th</sup> June 2012 in Ispra, Italy. The groups consisted of independent experts from within the EU and experts from the European Commission's Research Centre (JRC). The names and affiliations of these experts can be found in section 13.

The data used to compile all the various analyses contained within the report were collected under the frameworks of the Data Collection Regulation (DCR); cf. Council Regulation (European Commission (EC)) No 1543/2000 of 29 June 2000 and the data collection framework (DCF), cf. Council regulation (European Commission (EC) No 199/2008 of 25th February 2008). The data call requested economic data for the years 2008 to 2012.

In terms of compliance with the data call deadline, similar to the 2011 data call, most Member States attempted to do so. However, the quality and coverage of most datasets required improvement once inspected by JRC and national experts. The majority of uploading activity again took place after the data call deadline which impacted on both EWGs and JRCs ability to produce the 2012 AER in a timely manner.

In terms of the completeness of the Member States data submissions, most countries submitted the majority of parameters requested under the call. In many cases missing data relates to fleet segments with low vessel numbers for which data is hard to obtain. However, Greece provided no data whatsoever while this year's submission from Spain is much less complete than the previous year. This makes an evaluation of the overall economic performance of the EU fishing fleet in 2010 not possible. In terms of data quality, inevitably some 'abnormal' estimates for various parameters were detected by JRC or the experts and in many cases rectified by the Member States. However, some minor quality issues remain outstanding.

## **2.1 Terms of Reference for STECF EWG-12-05**

The working group was asked to:

- 1) Assess status of final national level analyses; identify any outstanding issues and implications for other analyses within the AER.
- 2) Assess the fish price analysis; check the quality and completeness of the data contained within the analysis and ensure the accompanying text reflects the data available. In a subgroup, add qualitative interpretations of the data and identify the main issues affecting fish prices.
- 3) Assess all regional level analyses; check the quality and completeness of the data contained within the analyses and ensure the accompanying text reflects the data available. Within subgroups, add qualitative interpretations of the regional analyses and identify the main issues affecting the economic performance of the fleets at regional level.
- 4) Assess the EU level analysis; check the quality and completeness of the data contained within the analyses and ensure the accompanying text reflects the data available. Within plenary, add qualitative interpretations and identify the main issues affecting the economic performance of the fleet at EU level.
- 5) Assess the data outputs from the special chapter on fishing rights trade; check the quality and completeness of the data contained within the analyses and ensure the provision of an accompanying text that reflects the data available. To be done in subgroup consisting of experts from MS who have tradable rights.
- 6) Assess the data outputs from the special chapter on overcapacity indicators; check the quality and completeness of the data contained within the analyses and ensure the provision of an accompanying text that reflects the data available. Provide an overall assessment of the usefulness and suitability of the approach to calculate forgone profits in relation to fleet overcapacity.
- 7) Assess the information provided by MS on financial position data and decide what analyses can be carried out with the data and information available.

## **2.2 Participants at EWG 12-05**

The full list of participants at EWG 12-05 held from the 4 to 8 June 2012 in Ispra, Italy is presented in section 10.



### 3. EU FLEET OVERVIEW

This chapter provides an overview of the structure and economic performance of the EU fishing fleet in 2010 and highlights some key trends between 2005 and 2011, based on data obtained from the latest DCF fleet economic data call and data held by Eurostat and the EU fishing fleet register.

#### 3.1 EU fleet structure

According to data held by Eurostat and the EU fleet vessel register, the total number of vessels in the EU fishing fleet in 2010 was 83,796, with a combined gross tonnage (GT) of 1.75 million tonnes and total engine power of 6.47 million kilowatts (kW). The overall capacity of the EU fleet decreased between 2005 and 2010 (vessels: -5.3%, GT: -13.0% and kW: -10.5%), despite a slight increase in 2007 due to the inclusion of data for new EU Member States, upper left).

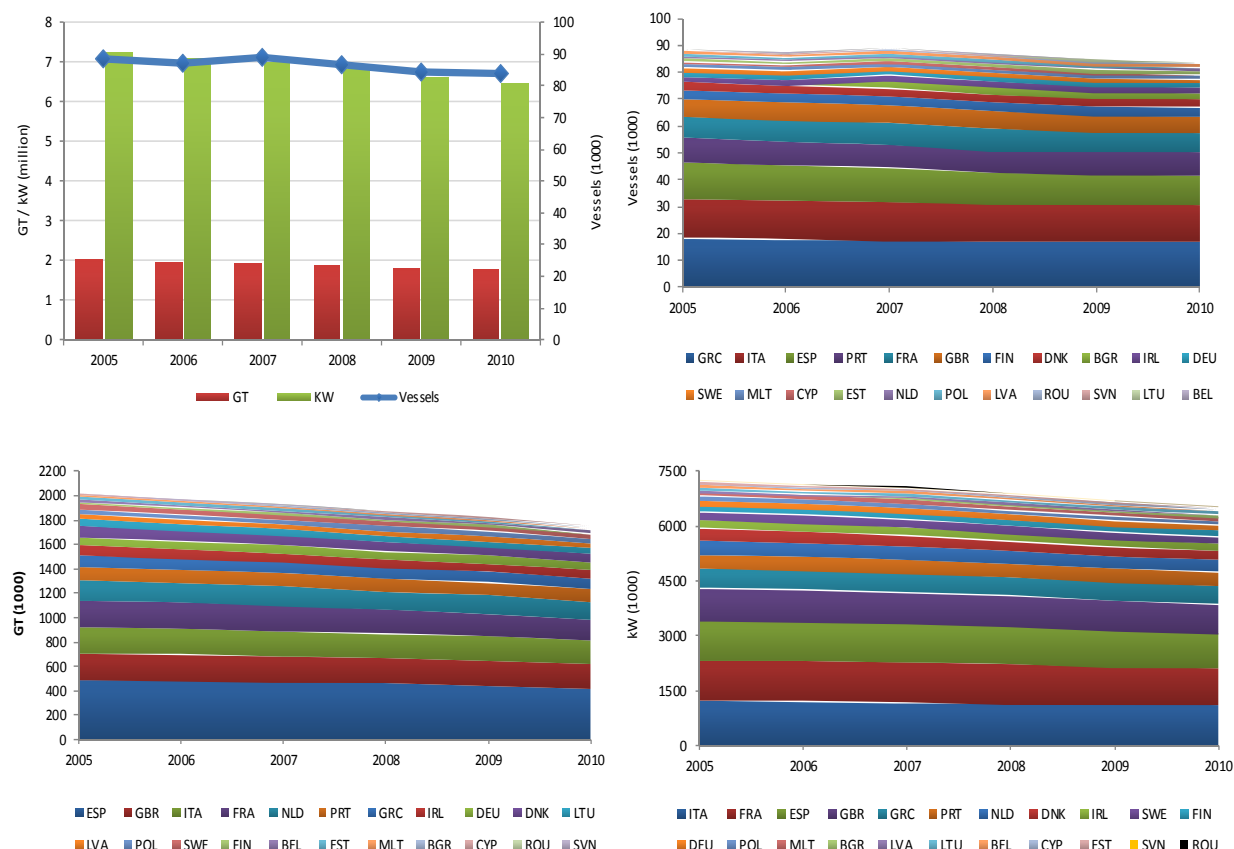


Figure 3.1 EU fishing fleet capacity trends: 2005-2010  
(Source: Eurostat / EU Fleet Register)

Greece was the Member State with the highest number of vessels in 2010 (20.5% of the total), followed by Italy (16.1%) and then Spain (12.9%) (fig. 3.1, upper right). Spain's fishing fleet was the largest in terms of tonnage (23.6% of the total), followed by the United Kingdom (11.8%) and then Italy (10.6%) (fig. 3.1, bottom left). Italy's fishing fleet was the largest in terms of engine power (17.2% of the total) followed by France (15.4%) and then Spain (14.4%) (fig. 3.1, bottom right). According to DCF data, the

Slovenian fleet was the oldest on average at around 35 years, while the Bulgarian fleet was the youngest, with an average vessel age of 20 years (data was not available for Spain, Cyprus or Greece).

### 3.2 Socio-economic structure of the EU fleet

According to Member States DCF data submissions, the total number of fishers employed in the EU fishing fleet (excluding Greece) in 2010 was 138,500, an increase of around 2.4% when compared to 2009 figures, however total employed in 2010 was 17.2% lower when compared to 2008 figures (fig. 3.2, upper left). The total number of FTEs in the EU fishing fleet (excluding Greece) in 2010 was 105,700. Spain had the highest level of employment both in terms of total employed and FTEs of all EU Member States (excluding Greece) fleets (28% and 32%, respectively), followed by Italy (21% and 21%, respectively) and then Portugal (13% and 16%, respectively) (fig. 3.2, upper right).

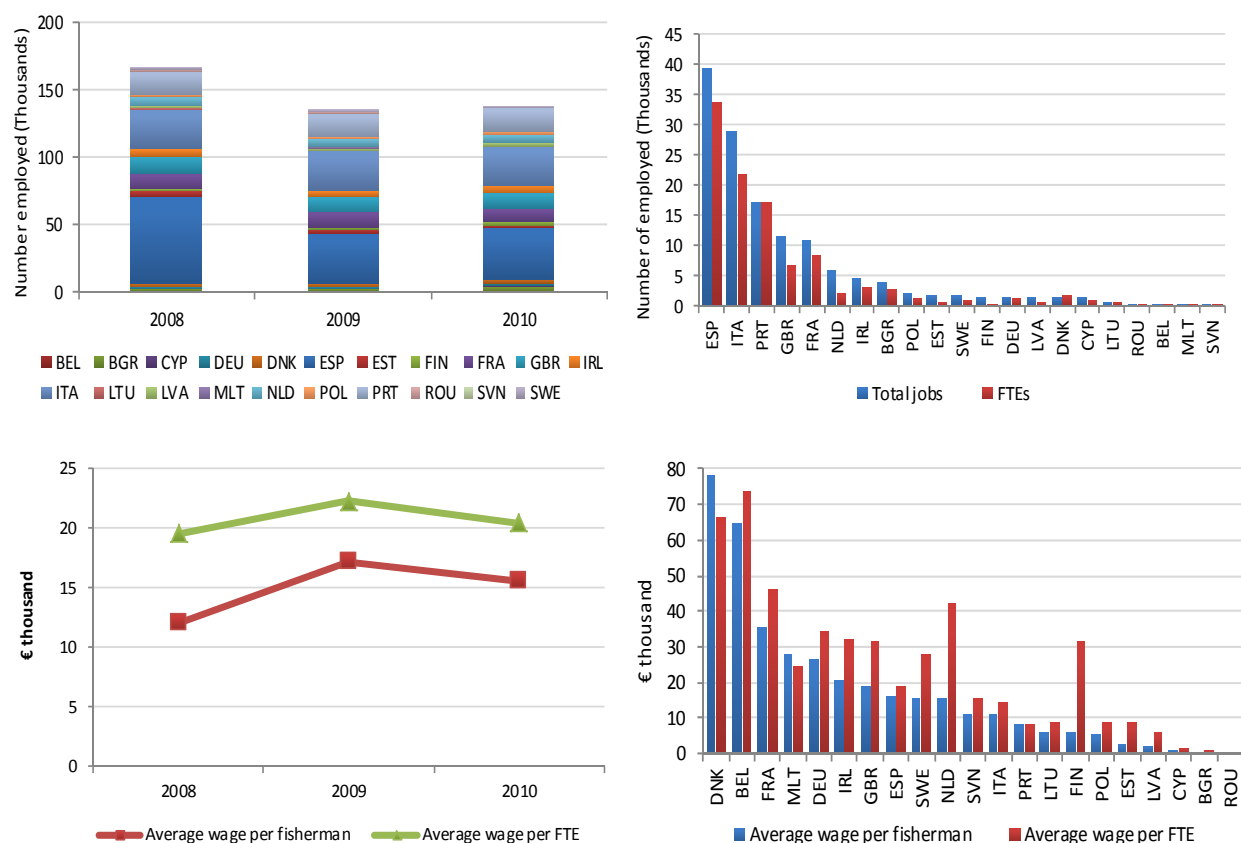


Figure 3.2 EU fleet employment and average wage indicators  
(Source: EU Member States DCF data submissions)

Data on crew costs and employment levels submitted by Member States suggest that average wages in the EU fish catching sector fluctuated between 2008 and 2010. The average wage per total employed and per FTE in 2010 was €15,600 and €20,400 respectively. Both wage rates in 2010 decreased compared to 2009 levels, by 9% and 10%, respectively (fig. 3.2, lower left). Average wage rates appear to fluctuate in line with fuel costs in recent years. In 2010 the Belgian fishing fleet paid the highest wages per FTE on average (€74,000), followed by the Danish fleet (€66,000), and then the French fleet (€46,000) (fig. 3.2, bottom right).

### 3.3 EU fleet fishing activity and output

According to Member States data submissions, the total number of days at sea reported by the EU fleet in 2010 was just under 3.85 million days, 95% of which were actual fishing days, an decrease of around 10% when compared to 2009 (fig. 3.3, upper left). However, these figures do not include Greece, Spain or Estonia due to non-submission of data. In addition, France and Slovenia did not provide any data for 2008 and 2009. French days at sea were imputed manually<sup>1</sup>. Slovenian days at sea are assumed constant between 2008 and 2010 for the purposes of this analysis. Italy reported by far the highest number of days at sea in 2010 with 43% of the total, followed by France (13%) and then the UK (11%) (fig. 3.3 upper right).

Data submitted on kW and GT fishing days by Member States (Greece, Spain and France excluded due to missing or inconsistent data) reveals that total kW fishing days for the remaining EU fleet in 2010 was 485 million, while total GT days was just under 130 million. The Italian fleet produced the most effort in terms of kW and GT fishing days (31% and 19% of the totals respectively) (fig. 3.3 bottom left). Data on the total amount of fuel consumed by Member States reveals that total consumption by the EU fleet was just under 2.5 billion litres in 2010, a 6% decrease compared to consumption in 2009 (Greece excluded due to missing data). The Spanish fleet by far consumed the most fuel, with 29% of total consumption, followed by the Italian fleet (16%) and then the French fleet (15%) (fig. 3.3 bottom right).

According to Eurostat statistics, the total weight and corresponding value of all fish landed by the EU fishing fleet (excluding Greece) in 2010 was 4.4 million tonnes and €6 billion respectively. Following a peak in weight and value terms in 2007 and then subsequent decreases in 2008 and 2009, there was a slight increase in both the volume and value landed between 2009 and 2010 of 2% and 1.2% respectively (Figure 3.4 upper left).

The Danish fleet landed the most in terms of weight in 2010 with 24% of the total landed in the EU (excluding Greece), followed by the Spanish fleet (17%) and then the UK fleet (11%). In terms of the value of landings, in 2010 the Spanish generated the highest value for their catch (31% of the total), followed by Italy (19%) and then the UK (12%) (fig. 3.4 upper right).

---

<sup>1</sup> For the French "days at sea", for the past years (2008 and 2009) this variable was calculated by the method of extrapolation of samples provided (samplings from a survey and samplings from fiscal source). In 2010 France started a new calculation method and the total of days at sea are calculated directly by Ifremer based on a new information database named "Sacrois". So there is a break in the series due to the changing of methodology.

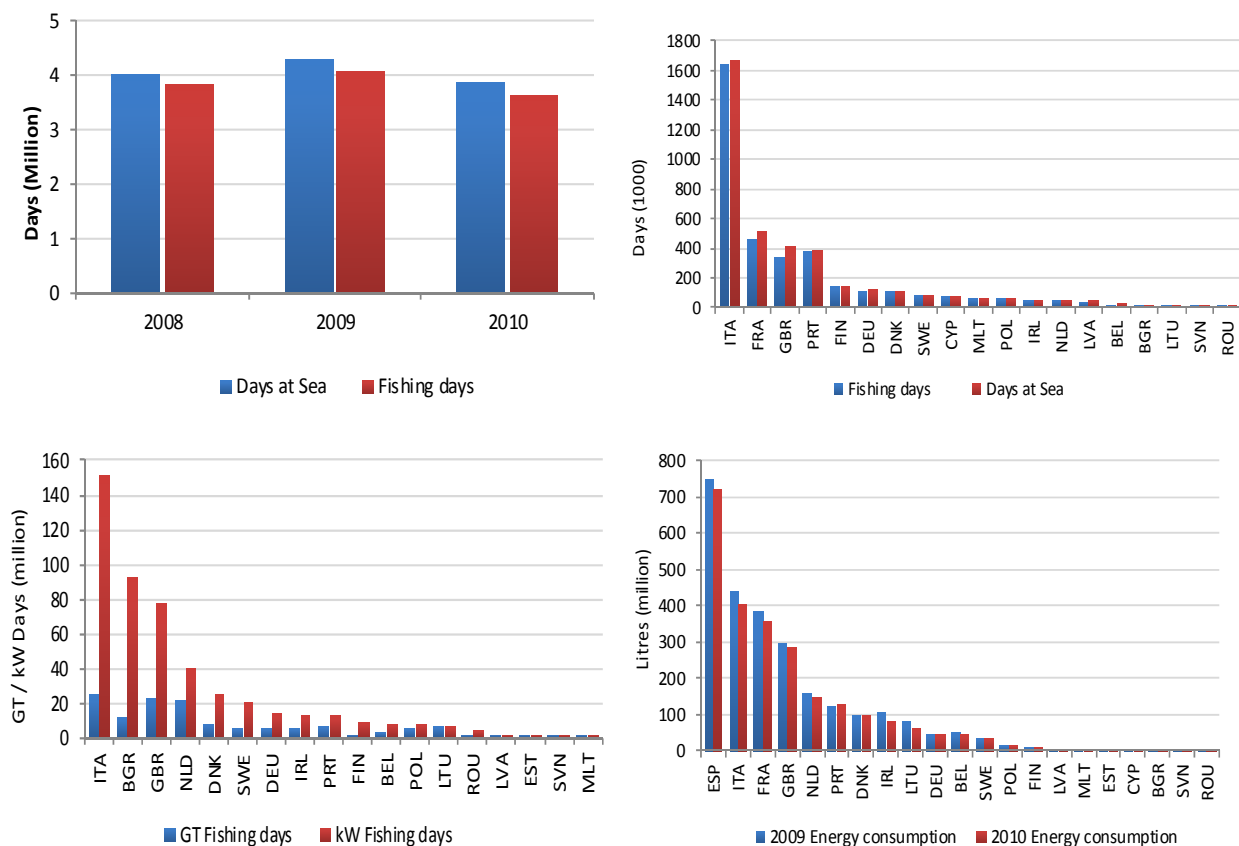


Figure 3.3 EU fleet fishing effort indicators  
(Source: EU Member States DCF data submissions)

DCF data submitted on weight and value of landings by species (Greece and Spain are excluded due to non submission of landings data) reveal that herring achieved the highest volume of landings by the remaining EU fleet in 2010, having narrowly overtaken sprat. The total weight of herring landed in 2010 was 505 thousand tonnes, a decrease of 0.8% compared to 2009, while the total weight of sprat landed was 471 thousand tonnes in 2010, a decrease of around 11% from 2010 (fig 3.4 lower left). The data also reveals that Norway Lobster achieved the highest value of landings by the remaining EU fleet, having overtaken common sole. The total value of landings of Norway lobster in 2010 was €302 million, an increase of 2.7% from 2009, while the total value of common sole landed was €300 million in 2010, an increase of around 1.1% from 2009 (fig. 3.4 lower right).

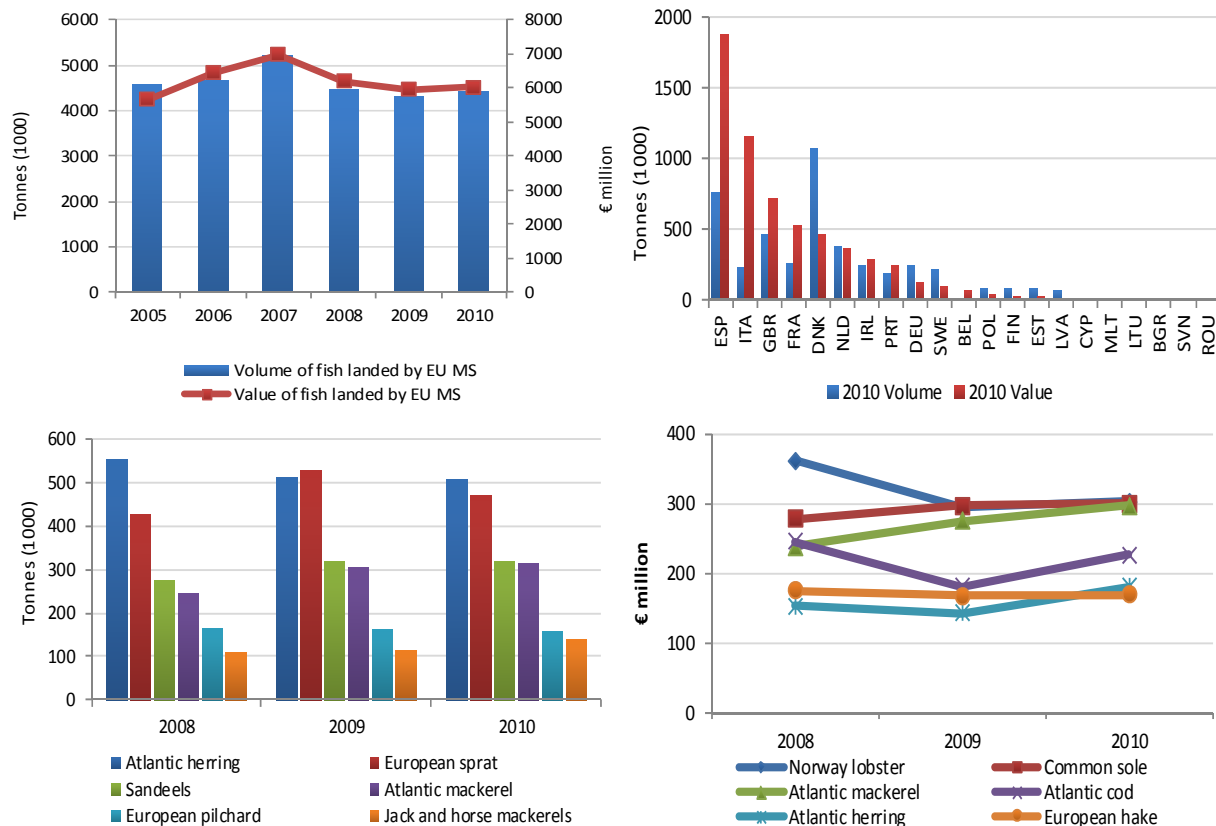


Figure 3.4 EU fleet weight and value of landings trends  
(Source: Eurostat (upper) and EU Member States DCF data submissions (lower))

Figure 3.5 contains the average real price of the top 10 species landed in the EU fleet in terms of value (left) and weight (right) for 2008-2010. In terms of value landed, the average first-sale price of most of the species analysed were generally higher in 2010, compared to year 2009 (fig. 3.5 left). The same tendency was observed for the average first-sale price of most of the species analysed in terms of weight landed.

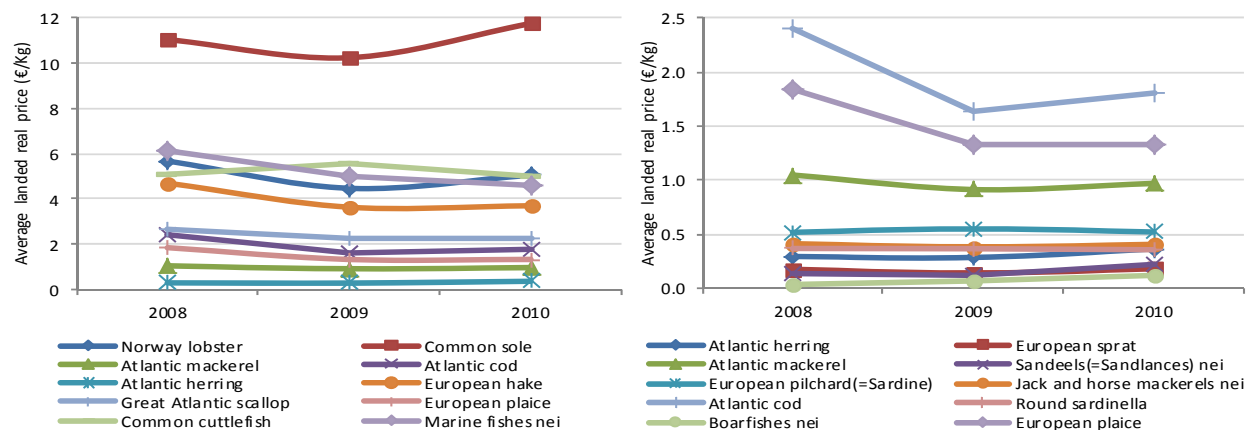


Figure 3.5 EU fleet average first sales price trends for key species  
(Source: EU Member States DCF data submissions)

### 3.4 EU fleet economic performance

According to Member States DCF data submissions, the total amount of income generated by the EU fishing fleet in 2010 (excluding Greece) was €7 billion. This amount consisted of €6.6 billion in fish sales, €34 million in fishing rights rental income, €193 million in non-fishing income, and €126 million in direct income subsidies (fig. 3.6 left). The total income of the EU fleet (excluding Greece) increased 2.6% between 2009 and 2010.

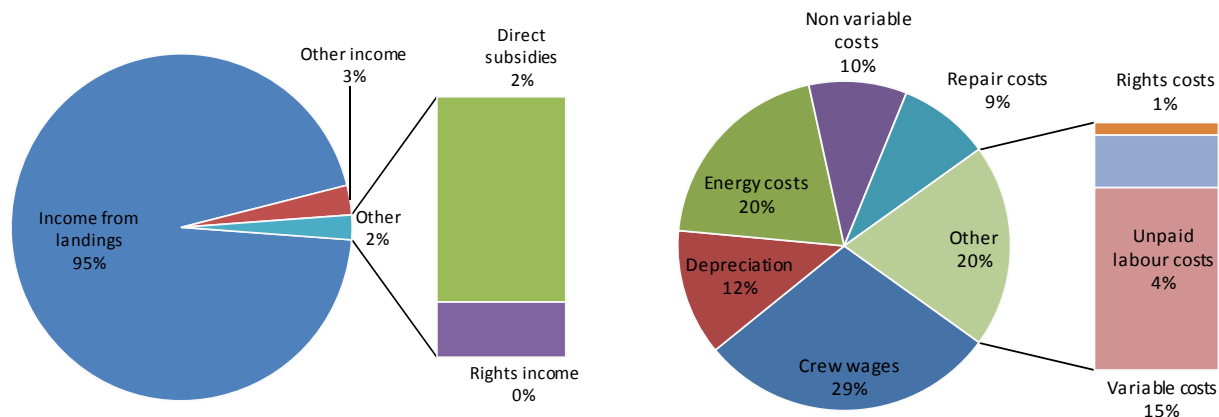


Figure 3.6 Income and cost type breakdown for the EU fleet in 2010  
(Source: EU Member States DCF data submissions)

The total costs of the EU fishing fleet in 2010 (excluding Greece) were €6.5 billion. This amount consisted of just under €1.9 billion in crew wages, €1.3 billion in fuel costs, €576 million in repair costs, €943 million in other variable costs, €614 million in fixed costs, €64 million in fishing rights leasing costs, €278 million in unpaid labour, €793 million in depreciation costs and €141 million in calculated opportunity costs (interest) (fig. 3.6 right).

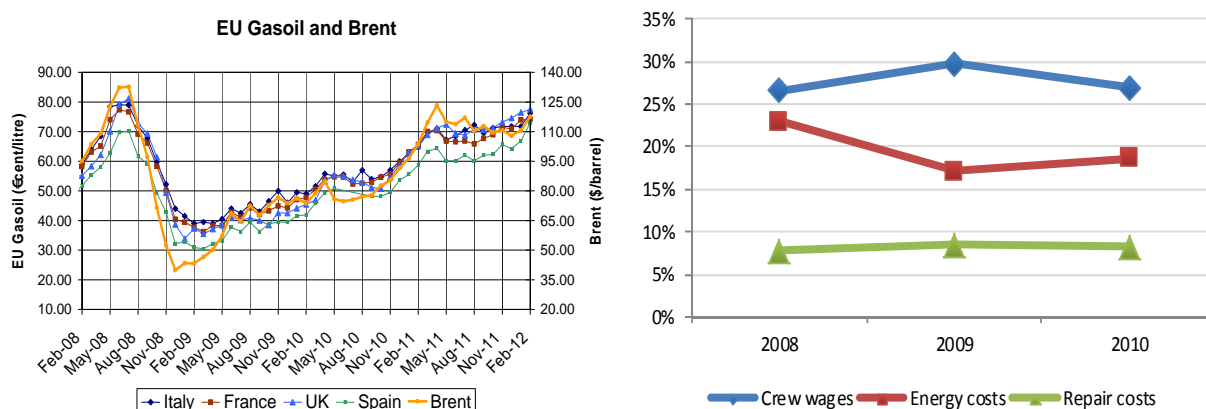


Figure 3.7 Trends in main cost items of the EU fleet  
(Source: DG MARE (left) EU Member States DCF data submissions (right))

The data suggest that as fuel prices eased in 2009, expenditure on crew wages and repairs consequently increased (15% and 12% respectively), while the total fuel cost of the EU fleet fell significantly (-23%), both in absolute terms and in relation to total income. Data for 2010 suggests a reverse in this trend, there was a 7% reduction in the amount spent on crew wages compared to 2009 and there was an 11% increase in the amount of expenditure on fuel compared to 2009, largely due to the steady increase in fuel prices during 2010 (fig. 3.7 right). Figure 3.7 (left) provides EU Gasoil and Brent prices for 2008-2011, which peaked in the summer of 2008 and have risen steadily since Spring 2009.

The EU fleet moved from a loss making position to a profitable position in 2010. The total amount of Gross Value Added (GVA), Gross profit and net profit (all excluding subsidies) generated by the EU fishing fleet (excluding Greece) in 2010 was €3.4 billion (a 5.7% increase from 2009), €1.2 billion (a 39.5% increase from 2009) and €288 million (an increase of over €300 million from 2009), respectively (fig. 3.8 left).

Figure 3.8(right) shows GVA, gross profit and net profit as a proportion of total income. Each of these profitability indicators all show improvement from 2009 results. GVA as a proportion of total income has increased steadily from 42% in 2008 to 47% in 2009 to 49% in 2010. Gross profit as a proportion of total income increased from 12% in 2008 to 13% in 2009 to 18% in 2010. Net profit as a proportion of total income increased from negative 0.4% in 2009 to 4% in 2010.

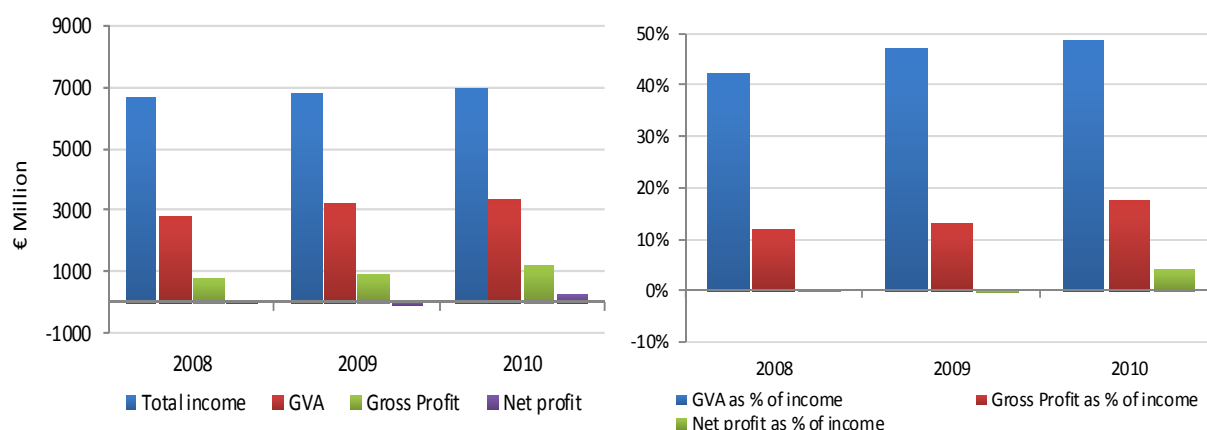


Figure 3.8 EU fleet economic performance indicators 2008-2010  
(Source: EU Member States DCF data submissions)

Analysis of economic performance by Member State reveals a mixed picture (Table 3.1 for main indicator totals for all Member States in 2010). Eleven out of 21 Member States generated a net profit in 2010, compared to 12 out of 21 in 2009. The data suggest that only 4 Member States produced a negative gross profit in 2010, compared to 5 in 2009.

The Spanish fleet generated the highest GVA in absolute terms in 2010 (22% of the EU total), followed by the Italian fleet (19% of the EU total) and the French fleet (15% of the EU total). In relative terms, The Danish fleet generated the highest level of GVA in relation to total income (66%), followed by the Portuguese fleet (60%) and the Irish fleet (58%) (fig. 3.9 lower).

The Italian fleet generated the highest gross profit in absolute terms in 2010 (27% of the EU total), followed by the UK fleet (16% of the EU total) and the Danish fleet (12% of the EU total). In relative terms, The Latvian fleet generated the highest level of gross profit in relation to total income (38%), followed by the Danish fleet (36%) and the Italian fleet (30%) (fig. 3.9 lower).

The UK fleet generated the highest net profit in absolute terms in 2010 (42% of the EU total), followed by the Italian fleet (39% of the EU total) and the Danish fleet (20% of the EU total). In relative terms, the Danish fleet generated the highest level of net profit in relation to total income (15%), followed by the German fleet (13%) and the Polish fleet (10%) (fig. 3.9 lower).

Results for Bulgaria, Cyprus and Malta have been excluded from Figure 3.9 due to questionable data quality. According to their data submissions, the Bulgarian, Cypriot and Maltese fleets generated net losses as a proportion of total income of 116%, 160% and 228% respectively. In addition, gross profits were negative for each Member State, while Bulgaria and Cyprus generated negative value added. Further work is required to evaluate the accuracy of these results, expertise from these countries was lacking during EWG 12-05.

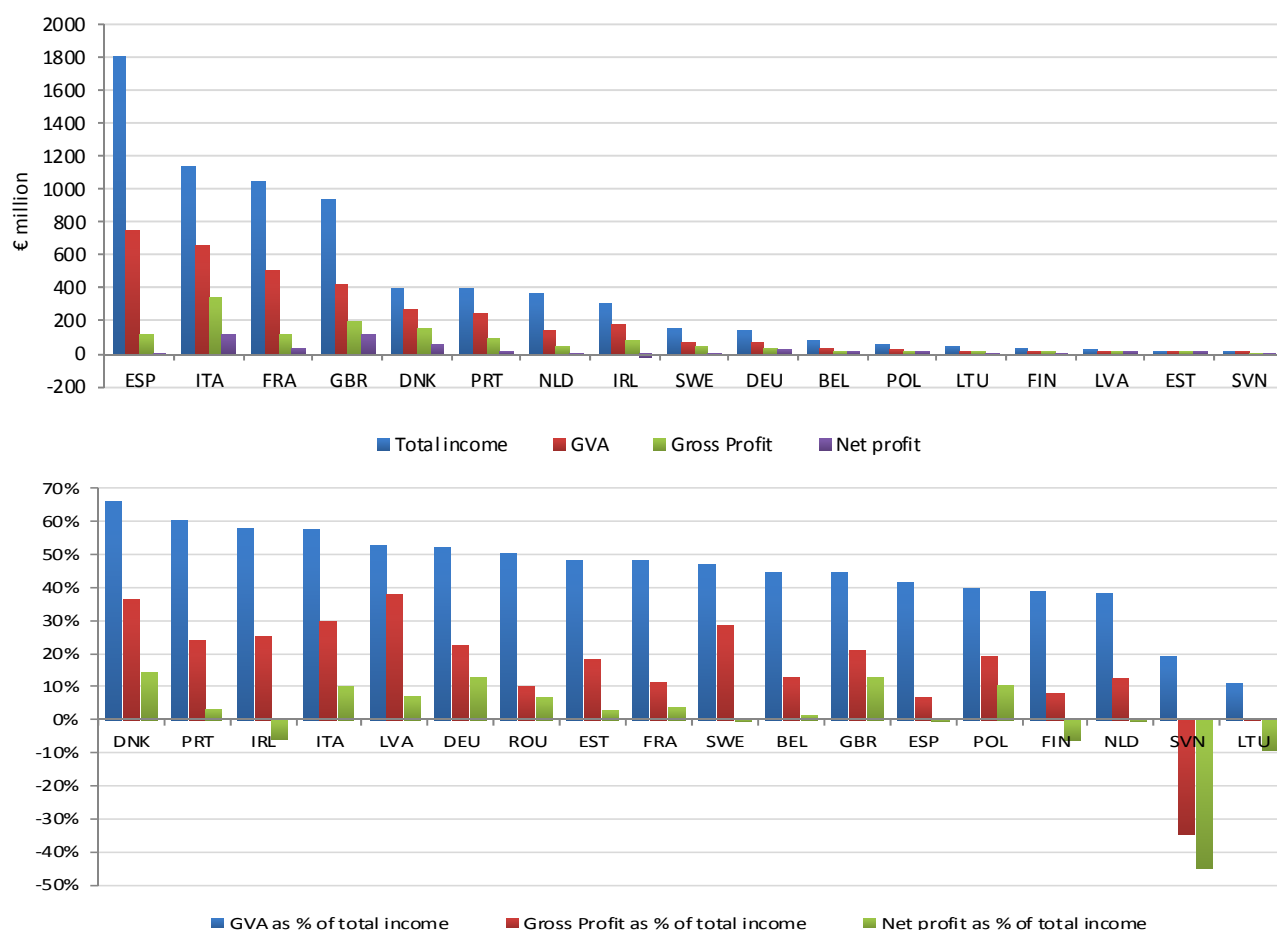


Figure 3.9 EU Member States economic performance indicators in 2010  
(Source: EU Member States DCF data submissions)

The profitability estimates shown in figures 3.8 and 3.9 do not include direct income subsidies in the calculation of profit. When we include direct income subsidies in the profit equation, the net profit position increases, from €288 million to €414 million. Meanwhile the EU fleet moved from an overall loss making position to a profitable position in 2009, from €-23 million to €151 million (fig. 3.10 upper). Figure 3.10 (lower) breaks the calculations down by Member State.



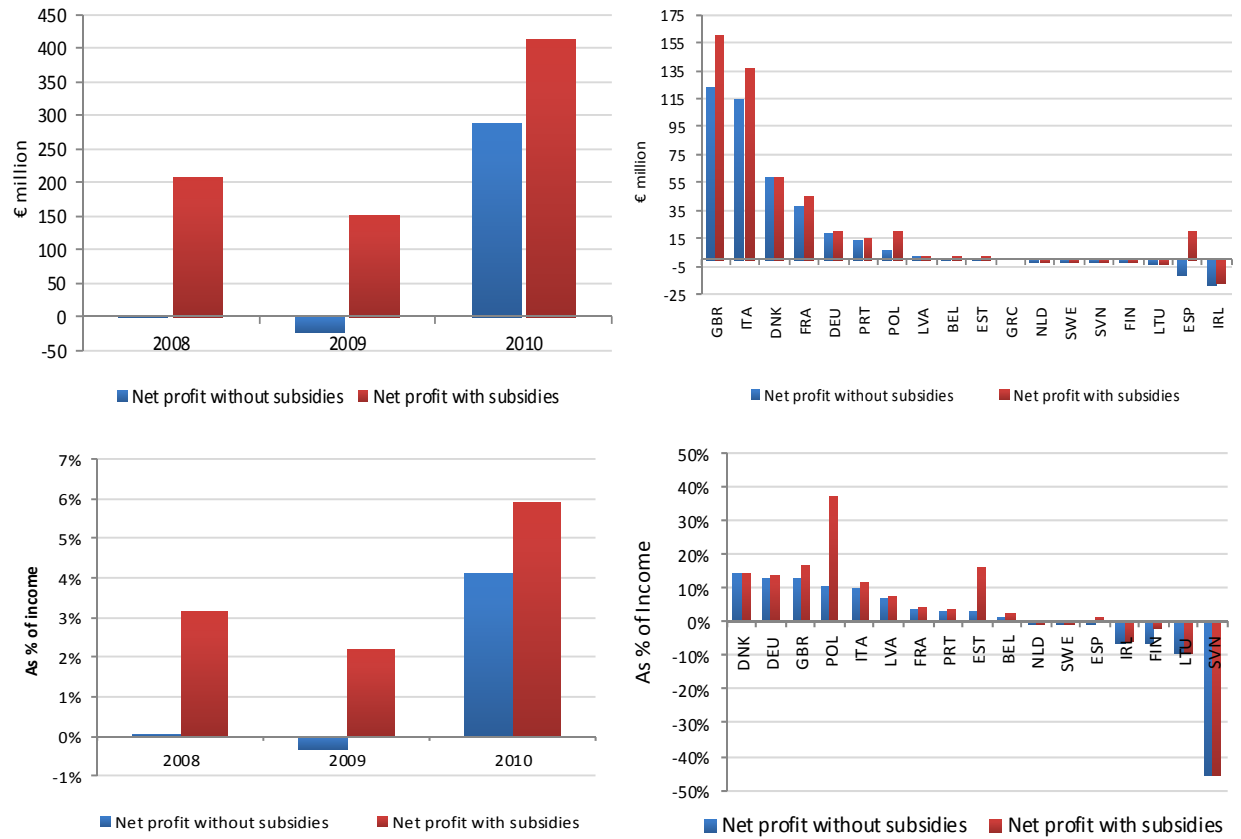


Figure 3.10 EU fleet net profit with and without direct income subsidies 2008-2010  
(Source: EU Member States DCF data submissions)

Table 3.1 Main indicator totals for EU Member States fishing fleets in 2010

Member State	Number of vessels	Gross Tonnage (1000 GT)	Kilowatts (1000 kW)	Total jobs	FTEs	Energy Consumption (million litres)	Days at Sea (million)	Weight of landings (1000 tonnes)	Landed value (€ million)	Direct subsidies (€ million)	Total income (€ million)	GVA (€ million)	Gross Profit (€ million)	Net profit (€ million)	Fixed Asset value (€ million)	Value of Fishing rights (€ million)
Belgium	89	16.0	51.6	400	352	46.4	17.9	19.8	76.2	1.5	81.4	36.3	10.3	0.9	66.1	-
Bulgaria	1,383	7.5	48.4	3,933	2,889	1.6	16.0	9.2	2.2	0.8	4.6	-1.7	-4.2	-5.4	16.5	-
Cyprus	1,132	4.7	45.5	1,421	911	3.2	75.6	1.4	10.2	2.0	12.2	-5.6	-7.1	-19.5	438.0	-
Germany	1,766	68.2	161.5	1,639	1,276	46.5	115.3	92.2	141.1	1.3	145.7	76.2	32.7	18.9	113.4	-
Denmark	2,682	68.0	247.4	1,531	1,807	94.6	113.9	782.4	378.3	0.1	404.7	267.0	147.4	58.8	441.9	739.8
Spain	10,847	414.5	934.1	39,281	33,678	719.2	-	755.5	1,869.4	32.6	1,806.4	752.6	120.7	-11.8	0.0	-
Estonia	947	17.3	44.4	1,948	521	4.3	-	81.3	13.1	2.0	15.1	7.3	2.7	0.4	18.2	2.8
Finland	3,270	16.4	171.1	1,703	313	9.1	148.9	122.1	26.6	1.5	31.6	12.2	2.5	-2.0	66.9	-
France	6,100	163.9	885.1	10,872	8,410	357.6	507.1	447.4	924.3	5.9	1,043.3	502.7	116.5	38.9	1,189.8	-
United Kingdom	6,409	217.3	843.2	11,494	6,918	285.3	418.5	601.3	832.0	37.7	943.8	418.7	200.2	122.1	437.1	771.3
Ireland	2,109	68.7	193.9	4,805	3,119	79.7	53.2	314.2	202.1	1.0	308.5	179.1	78.5	-18.0	645.5	-
Italy	14,969	191.2	1,118.6	28,982	22,002	402.7	1,667.8	223.0	1,102.8	22.2	1,137.0	652.9	335.5	113.6	974.2	-
Lithuania	193	49.8	57.7	720	520	63.3	10.6	107.5	59.9	0.1	42.6	4.7	0.2	-4.0	47.6	-
Latvia	771	9.8	26.7	1,619	521	6.5	43.6	74.0	21.0	0.0	21.9	11.5	8.2	1.6	45.6	-
Malta	1,112	12.3	85.5	361	256	5.3	65.4	1.8	8.8	0.6	9.8	1.3	-8.8	-22.3	59.3	1.7
Netherlands	725	137.2	293.8	6,039	2,205	146.1	50.8	381.6	354.6	0.0	358.5	136.6	43.7	-0.8	343.2	234.7
Poland	823	38.4	91.7	2,124	1,268	12.4	62.1	170.8	40.0	14.8	55.0	21.8	10.4	5.7	99.0	-
Portugal	8,606	103.3	377.6	17,323	17,080	127.8	383.7	189.3	347.3	2.0	400.7	240.9	96.1	13.2	384.6	-
Romania	430	1.0	5.4	444	403	0.2	6.5	0.2	0.5	0.0	0.5	0.2	0.0	0.0	0.0	-
Slovenia	185	1.0	11.0	116	82	0.6	7.7	0.8	2.0	0.0	2.4	0.5	-0.8	-1.1	3.5	-
Sweden	1,417	38.6	196.6	1,765	990	34.0	84.8	204.5	103.3	0.0	154.8	72.7	44.7	-0.9	226.4	-

(Source: EU Member States DCF data submissions, Greece excluded)

### 3.5 EU fleet economic performance by gear type

When comparing the economic performance of the mobile and passive gear segments, the data suggest that between 2008 and 2010 the passive gear segments were generally more profitable than the mobile gear segments. Figure 3.11 (upper) shows that GVA, gross profit and net profit as a proportion of total income were consistently higher for the passive gears over the time period. GVA as a proportion of income varied between 52-57% for the passive gears, compared to 39-46% for the mobile gears. Gross profit fluctuated between 17-22% for passive gears, while mobile gears fluctuated between 11-19%. The passive gears made net profit between 2008-2010, while the mobile gears made net losses in 2008 and 2009. Note that these calculations at segment level do not include all EU fleet segments due to missing or incomplete data sets. The segments included in these analyses accounted for 93% of the total EU fleet income in 2010.

The data also suggest that 36% of mobile gear fleet segments made losses in 2010 i.e. vessels in these segments on average made insufficient returns on capital invested. The corresponding figure for 2008 was 47%. In addition, 14% of mobile gear fleet segments generated negative gross profits on average in 2010 i.e. vessels in these segments on average did not generate enough income to cover operational costs. The corresponding figure for 2008 was 17% (fig. 3.11 lower left). In comparison, 39% of passive gear fleet segments made losses on average in 2010, compared to 41% in 2008, while 26% of static gear fleet segments generated negative gross profits in 2010, compared to 24% in 2008 (fig. 3.11 lower right).

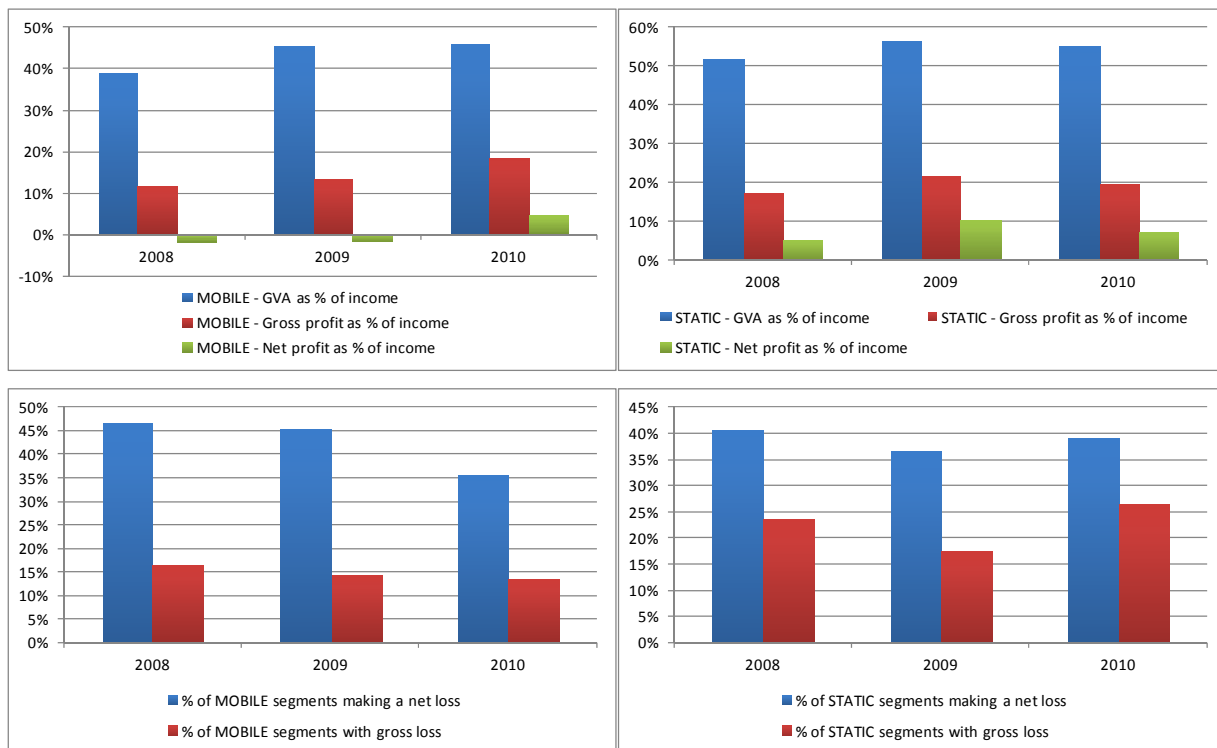


Figure 3.11 EU fleet economic performance – mobile and passive gears  
(Source: EU Member States DCF data submissions)

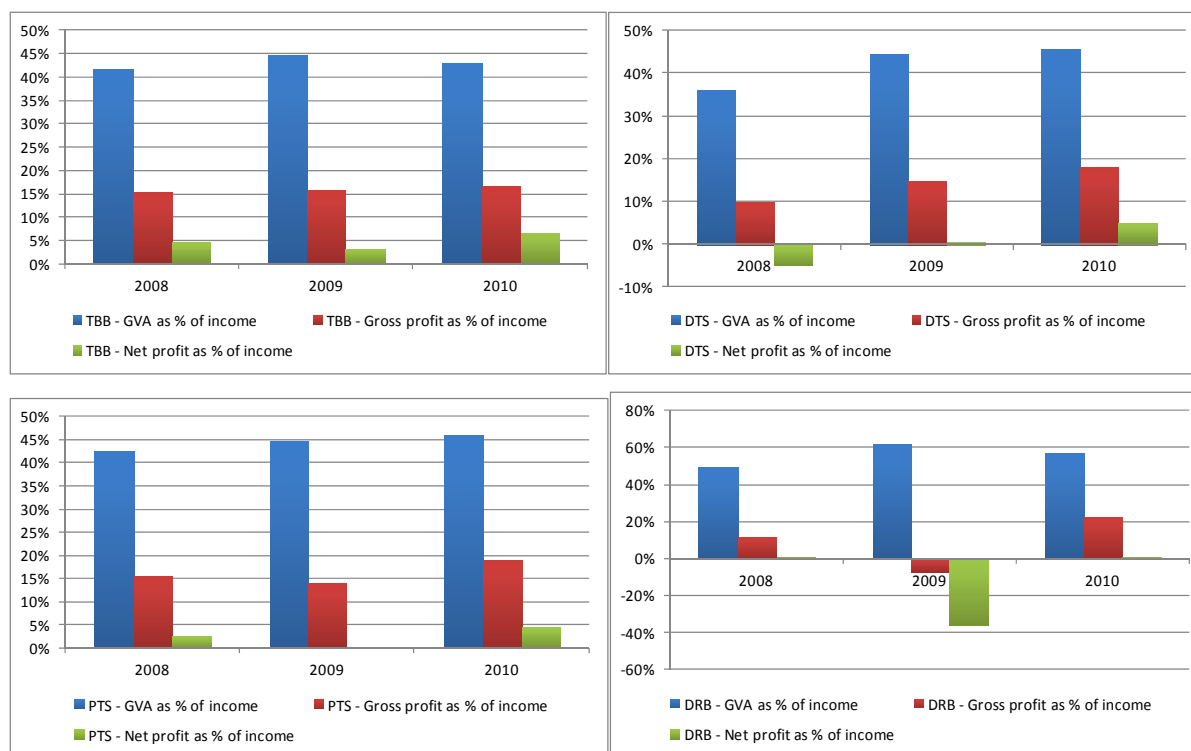


Figure 3.12 EU fleet economic performance by mobile gear type  
(Source: EU Member States DCF data submissions)

Figure 3.12 contains analyses of economic performance of specific mobile gear types. Data for all mobile gear types show an improvement in economic performance from 2009 to 2010. Gross profit as a % of income from the beam trawlers is consistently around 15% over the period analysed, while net profit as a % of income increased from 4% in 2009 to 7% in 2010. This is a particularly interesting result given that the beam trawl fleet had the poorest economic performance of all the mobile gear types in the previous AER. The data suggest that the dredge (DRB) segments were the least profitable between 2008-2010, with net profit as a % of income of 1% in 2008 and 2010 and -36% in 2009. Gross profit was also negative for this gear type in 2009. This result is particularly interesting given that in last years AER, dredge vessels were the most profitable of the mobile gears. Gross and net profits as a % of income for the demersal trawl and seine vessels increased from 0% and 15% to 5% and 18% respectively between 2009 and 2010.

### 3.6 Assessment for 2011 and 2012

The 2012 call for fleet economic data requested transversal data (effort, landings and capacity) from Member States for 2011 which was used to forecast fleet economic performance indicators for 2011. Only 13 out of 22 Member States submitted the data required to carry out the forecasts. The remaining Member States were not in a position to provide the data within the necessary timeframe.

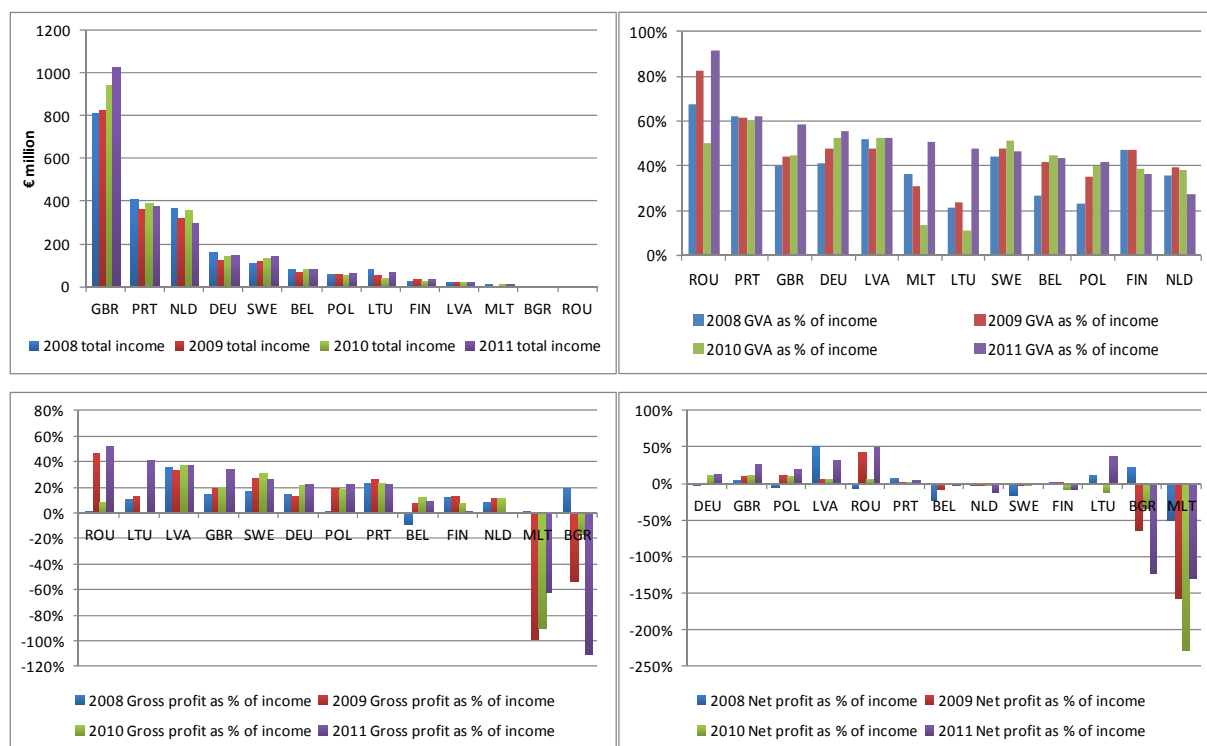


Figure 3.13 EU Member States fleet economic performance forecasts for 2011  
(Source: EU Member States DCF data submissions)

Projections for total fleet income and GVA, gross profit and net profit as a proportion of income are presented for 2011, along with corresponding actual 2008, 2009 and 2010 data. The forecasts suggest that in 2011 total fleet income increased in 10 out of the 13 Member States. The forecasts also suggest that in 2011, GVA as a proportion of total income increased in 7 out of 12 Member States while gross and net profits as a proportion of total income increased in 8 out of 12 Member States. Therefore, improved economic performance is expected in 2011 for around three quarters of the national fleets analysed.

A summary of the main issues affecting the economic performance of each EU Member States national fleet in 2010 and 2011 are summarised below:

### Denmark

Based on landings value for 2011, the Danish fishery had an increase in landings value compared to 2010. Higher prices on some of the most important species such as cod, mackerel, herring, sprat and Norway lobster in most cases outweighed the decrease in total weight of landings. Combined with a continued restructuring of the fleet, this is expected to result in a better economic performance in 2011 compared to 2010.

Looking forward to 2012, things do not look so positive. A very low TAC for sandeel will have a major impact on the economic performance of many vessels. Furthermore, the uncertain situation with the mackerel stock in the North Atlantic, and the on-going discussions with Iceland and the Faeroese Islands could also have an impact on the performance of the demersal trawl / seine above 40m. Negative developments are expected in the price for most of the species caught by Danish fishermen, so in total the economic performance in 2012 is expected to be worse than in 2011.

## **Estonia**

Due to the continuous decrease of quotas for the internationally TAC-regulated species (European sprat and Atlantic herring), a decline in total catches will be expected in 2011 and 2012. However, increases in average prices are estimated to have resulted 5% increase in income, from €13.1 million in 2010 to €13.8 million in 2011.

In 2011 and 2012 the number of trawlers in the Estonian national fleet continues to decrease. However, the number of small coastal vessels is likely to increase. The rise in fuel prices will be an important factor influencing fleet economic performance during these years.

## **Finland**

At the Finnish fleet level, the increases in average prices and other income are estimated to have resulted in an increase of 4.7% in income, from €31.6 million in 2010 to €33.1 million in 2011. Total operation costs are expected to have increased by 14%, mainly due to the increase in fuel and labour costs. Operating cash flow, GVA and economic profit are expected to decrease to €8.7 million, €7.6 million and €-4.5 million respectively in 2011 (Table 7.1.2; fig. 7.1.4b).

There have been increasing investments in coastal fisheries, but profits have been hard to gain. The average vessel size is increasing in trawler segments. Although first sale prices of coastal fish are increasing, the rising fuel cost is impacting significantly on the profitability of fishing businesses.

## **France**

The year 2010 was better in terms of activity, with an average increase in fish price and improvement in exports. However, results contrast according to fleet segment and supra region (good year for cephalopods in the Atlantic, bad for pelagic fish in the Mediterranean, etc). The beginning of the year 2011 was also rather good, in terms of stock abundance and price of species. However the problem of rising fuel prices reappeared and will again have a direct negative impact on the profitability of vessels.

## **Germany**

As landings are the dominant source of income, the turnover of the German non-pelagic fleet in 2011 as comprehensively presented in 7.1.2 is almost identical with the fleet income in 2011. Both volume and value of landings increased, but it has to be born in mind that 2010 results were quite low compared with previous years.

The capacity of the German fleet continued the decreasing trend in 2011 and 2012, and also the total effort spent in 2011 has further decreased (Table 7.1.1). It is therefore to be expected that most cost items will be further lowered as well. For several TAC-regulated species, which are important to the German fleets (North Sea herring, plaice, whiting and haddock, Baltic cod) quota has been increased. The favourable stock development has been related to long term management plans having become effective. On the other hand, drops in price had been experienced, as the market appears not to be easily receptive to additional supplies. This applied particularly to plaice and common shrimp, but also to cod. On the other hand, the price for herring remained rather stable. The Eastern Baltic cod fishery has been MSC certified, and the approval process for Baltic herring as well as for brown shrimp is in progress. According to previous experience the certification has paid off in higher prices, exceeding the cost for certification.

There has been a considerable effort spent on the reduction of costs, mainly fuel. Vessels have attempted to optimise the trawling speed, thus consuming less fuel. Pulse beam trawls are being

investigated for the brown shrimp fishery. A pilot project on energy savings with respect to on board equipment (shrimp boiler, heating, drag reduction) has shown promising results. It can be expected that the implementation of those measures will lead to a further decrease in fuel consumption.

Fishing effort is going to continue to decrease, which is going to reduce variable costs. In 2011, several vessels were scrapped as there was extraordinary permission given to permanently transfer quota from one vessel to another without the obligation to keep both vessels operable. If the price development for brown shrimp continues to be detrimental to the enterprises involved in that fishery, it is likely that more vessels are going to go out of business. This could be observed in 2011 when the price per kg dropped from €2.20 in the previous year to €1.67 while the total turnover from brown shrimp dropped from €40 Million to €28.5 Million.

## **Ireland**

The composition, by segment, of the Irish national fleet (i.e. >10m and <10m LOA) in 2011 and 2012 reflects that reported for 2010. No significant removals or additions to the national fleet have occurred other than adjustments due to accidental loss and damage and occasional redundancy, particularly in the polyvalent segments <10m LOA.

The key drivers influencing the economic performance of the Irish National fleet in 2010 were low first point of sale prices returned to vessels and the increasing cost of fuel in the latter part of the year. Oil price increases have continued in 2011 and are expected to further affect the profitability of the Irish national fleet in the future.

Segments of the fleet have sought to consolidate market share, improve market access and product prices, through collective engagement with internationally recognized certification processes. Vessels of the pelagic and polyvalent fleets targeting mackerel, achieved Marine Stewardship Council (MSC) certification in 2009 and 2010 and an internationally accredited (ISO 65), National, Seafood Stewardship Standard is available to the main segments of the Irish National fleet in 2012.

## **Italy**

In 2010 a reduction in the demand of seafood and a consequent reduction in fish prices have affected the economic performance of the sector. As no relevant change has been registered in these factors, it is expected that low demand and reduced prices have affected the economic performance in 2011 and 2012.

Declines both in landings and average prices are estimated for the Italian fleet in 2011. Total operation costs are expected to have increased, mainly due to the increase of fuel costs that started in the second half of 2010, which is consistent with the decrease in effort (fishing days). Operating cash flow, GVA and economic profit are expected to decrease too.

## **Latvia**

Overall, there were two trends in the activity of the Latvian Baltic Sea fishing fleet – a reduction of volume of landings and an increase in average prices of fish, resulting in a 10% increase in income, from €21.9 million in 2010 to €24.2 million in 2011. Total operating costs are expected to decline by 24%, mainly due to a negligible fluctuation in the cost structure. Effort decreased by 14% (days at sea or fishing days) and landed volume by 19%. The value of landings was relatively stable at around €20.7 million. Operating cash flow and economic profit are expected to increase to €2.5 and €2.8 million respectively in 2011.

## **Lithuania**

The main segments of the Lithuanian fleet (area 27 drift and fixed nets 0-10m and area 27 demersal trawlers 24-40m) showed an increase in volume and value of landings, fishing days as well as prices of certain fishes, resulting in a 13,1% increase in income, from €3,27 million in 2009 to €3,7 million in 2011. Total operating costs are expected to rise, mainly due to record prices for fuel in 2011, which affects energy costs and other variable costs which are related to oil prices. Repair and maintenance costs are expected to increase as well, mainly due to the increasing age of fleet. The value of landings and income generated decreased because of the declining number of enterprises involved in coastal area fishing. The income from landings is expected to rise or at least to remain at the current level for the demersal trawlers 24 -40m segment (targeting mainly Atlantic cod) of the Lithuanian fleet, because of increased quotas for Atlantic cod and good price expectations. A less optimistic forecast is foreseen for the vessels fishing pelagic species such as European sprat and Baltic herring in Baltic Sea, who are associated with lower quotas and prices.

## **Malta**

Overall, at the Maltese national fleet level, slight increases in landings volume and higher than average prices resulted in a 30% increase in the value of landings, from €8.8 million in 2010 to €11.4 million in 2011. Total operational costs for the year 2011 are expected to decline, consistent with the decrease in effort (days at sea) which decreased by 37% between 2010 and 2011. Economic loss for the year 2011 is expected to decrease due to an expected increase in income from the sales of landings and the lower variable costs.

Most economic variables for the year 2012 are expected to remain stable; however fuel costs are expected to increase due to the substantial rise in fuel prices. As a consequence, profitability from this point of view is expected to be negatively affected.

## **The Netherlands**

Overall, at the Dutch fleet level declines in landings and average prices are estimated to have resulted in a 10% decrease in income, from €355 million in 2010 to €320 million in 2011. Total operation costs are expected to have increased by 5%, mainly due to an increase in fuel prices and therefore also fuel costs. Effort in days at sea and fishing days decreased. Wages are lower because of lower income and higher fuel costs (dependency). Operation cash flow, GVA and economic profit are expected to decrease to €-10 million in 2011.

## **Poland**

In 2010 Polish fisheries was highly profitable (€6.1 million or €20.9 million with subsidies). According to provisional 2011 data, good economic performance of the Polish fleet can be expected again. This will be a result of increased value of fish landed, what was a consequence of higher cod TAC and generally higher fish prices. In 2011 cod, sprat and herring prices increased 23%, 48% and 18% respectively. Total landings value for 2011 was 21% higher than in 2010. On the other hand, total effort deployed (days at sea) decreased by 5%. The increase in landings value was especially significant in PG 1012 (83%) and DTS VL1218 (74%), since value of landed fish decreased for HOK VL1218 (-54%). This can be partly explained by lower numbers of vessels belonging to this segment in 2011 (27 compared to 37 in 2010). The most important fleet segment in terms of turnover (TM VL2440) increased its landings value by 30%, with very little increase in days at sea (3%). This increase can be explained by higher pelagic fish prices (volume of landings dropped by 3%).



The economic situation of the Polish fishing fleet may deteriorate in 2012. This will be a result of an increased number of vessels that will return to fisheries after termination of the 3 years cod quota allocation system implemented in 2009 (rotating suspension of 1/3 of the cod fleet each year). Lower TACs for pelagic species (sprat and herring) maybe partly compensated by higher prices. Increasing foreign landings of Baltic cod in Poland and higher TAC for this species may mean that cod supplies will exceed market demand. This imbalance may result in price drops and consequently the deterioration in the economic situation for demersal segments.

No significant changes in fleet capacity or composition took place in 2011, the total number of vessels was slightly lower (2%) than in 2010, effort (sea days) declined by 5%.

### **Portugal**

In 2011 and 2012 there were no significant changes in the structure of the fleet. There is an overall trend of decreasing vessel numbers and capacity, both in tonnage (GT) and power (KW). There was also a slight decrease in the number of licensed vessels, as result of no permission/license for operating in these years or for the withdrawal of some vessels, measures implemented as part of the plan to adjust fishing effort.

Portuguese landings are expected to increase.

### **Romania**

In 2011, 58 new vessels were registered in in the Romanian fleet. Landings increased by 200% mainly due to an increase in the numbers of vessels registered in the Romanian Fleet and the species targeted like Thomas' rapa whelk (value of landing increased by 29% between 2010 and 2011).

### **Slovenia**

The number of vessels, GT and KW will remain relatively stable in 2011 and 2012. Effort will probably increase in 2011 and 2012, because of low fish stocks in the Adriatic Sea. If fishermen want to hold the volume of landings at the current levels, they will have to increase the number of fishing days. Landings volume has decreased since 1990, so we can expect that the volume of landings will decrease also in 2011 and 2012. Fuel consumption depends on the price of the fuel. The fuel prices were high in 2011. This trend continues in 2012. In the first third of 2012, fuels prices even reached record levels. So we can expect decreasing fuel consumption despite increased number of fishing days.

When the crisis ends, we can expect increases in fish prices. This will also have an effect on income which will also increase, of course, assuming that the catch volume remains unchanged. The level of expenditure depends mostly on crew wages, repair and maintenance costs and fuel costs. We can expect that fuel costs will increase in 2011 and 2012, while on the other hand crew wages will probably decrease, due to the a decreased number of employees. Because of an old and poorly equipped fleet we can expect increases in repair and maintenance costs in 2011 and 2012.

Because the fleet is old, reduced catches and increased costs may be expected, so much so that profit will decline in 2011 and 2012. Due to the poor condition and profitability of Slovenian fishing fleet, we cannot expect increases in operating cash flow, GVA and economic profit.

### **Sweden**

Towards the end of 2009 Sweden introduced an ITR system for pelagic quotas. The first transactions took place at the beginning of 2010. The first effects of these transactions should have become visible in

2010 in terms of profitability for the pelagic fisheries. However decreases in quotas for pelagic species (most importantly for herring and sprat) last years may have a negative effect on the profitability of the pelagic segments. The large effect of the new system will most probably be seen in 2011 years data when capacity has been removed from the fleet.

Fuel prices increased during 2010 and 2011 and remained at a high level during the beginning of 2012 which will have an effect on all fisheries. The increase is supposed to have had the most effect on the segments fishing with active gears (e.g. trawls and seiners). In total the fuel consumption went down during 2009 but then increased during 2010. The large demersal and pelagic vessels increase their fuel consumption in 2010. The fuel consumption for the rest of the fleet has been decreasing over the previous years, in part due to decreases in capacity and in part due to changes in fishing patterns and fishermen's behaviour. The question is how much further this rationalization can occur without significant investments in new technologies and newer vessels.

The general trend since the beginning of the 2000s is a decrease in capacity, i.e. the number of vessels which is also reflected in the decrease of total engine power and gross tonnage. This is partly due to management efforts in decreasing the fleet size in order to bring it in balance with the resources. But that is not the whole truth since a part of the decrease due to the fact that many fishermen exit the industry as they cannot make a living from fishing anymore. There is also a recruitment problem in fisheries since it is not an attractive way of living for younger people due to the low profitability and high entrance costs. The low recruitment is reflected in the increasing average age of the Swedish fisherman. The development of a decreasing fleet size and increasing average age is expected to continue for some time.

### **United Kingdom**

Western Waters effort limits for scallop dredging were exceeded in 2011 and the UK had to buy in unused effort entitlement from other MS. The effects of this limit are now effectively restricting scallop dredging activity of UK vessels which may restrict volume and value of landings in the short term but also may protect the stocks from over-exploitation for the long term benefit. From a fleet financial and economic point of view, the way in which the available effort is allocated among the vessel owners seeking a share is a crucial question.

Fuel prices are again reaching or exceeding the levels seen in 2008 and this is clearly reducing profits in the immediate term. In the longer term it acts as an incentive to develop less fuel-dependent fishing methods.

The catch quota trials for cod have eased restrictive days at sea limits for a small number of vessels in the white fish fleet in the last year or two. However for other vessels, time permitted at sea is, as intended, restricting their ability to operate and therefore restricting their ability to trade profitably in the short term. The aim of the restrictions is to enable the cod stocks to recover and secure longer term fishing opportunities but it is possible that some businesses will not survive until the effort restrictions can be eased under the terms of the recovery plan. The expectation of further effort cuts under the cod recovery plan and stated efforts among industry leaders to resist further reductions in effort is creating great uncertainty and concern about the near future among vessel owners.

The lack of agreement over mackerel quotas for Iceland and Faroe is continuing to cause concern for the health of the stock and future fishing opportunities for UK vessels. An increase in landings volume by vessels from other countries can be expected to put downward pressure on global prices for mackerel, putting further pressure on UK pelagic vessel businesses.

Management and allocation of quota to under 10m vessels continues to be controversial in England. Pilot schemes of community-managed quota schemes are due to start. The highly-active and high capable under 10m whitefish vessels need to be able to access more fishing opportunities than the amount granted to all vessels in the under 10m pool.



## **4. REGIONAL ANALYSES**



## 4.1. Baltic Sea

### 4.1.1. EU Baltic Sea fleet general overview

The Baltic Sea is covered by ICES areas IIIb, IIIc and IIId. Eight Member States were involved in Baltic Sea fisheries in 2011. These countries were Denmark, Sweden, Finland, Estonia, Latvia, Lithuania, Poland and Germany. According to the available landings data there were 33 fleet segments operating in the Baltic Sea in 2011. The total days at sea amounted 421.4 thousand days at sea. The weight and value of landings amounted to 569 thousand tonnes and €230 million, respectively. Finland, Germany and Poland accounted for around 67.5% of the total days at sea (mostly generated by small scale fisheries). In terms of landed weight, Finland (120 thousand tonnes), Poland (111 thousand tonnes) and Sweden (108 thousand tonnes) were the leading countries followed by Denmark, Estonia and Latvia. For confidentiality reasons, the total catch weight excludes the German pelagic trawl segment, which would have increased the total volume of catch of the German fleet by around 26%. The total weight of landings in the Baltic Sea decreased 26% between 2009 and 2011. The charts in figure 4.1.1 show the proportion of days at sea, landings weight and value attributable to each Baltic Sea Member State in 2011.

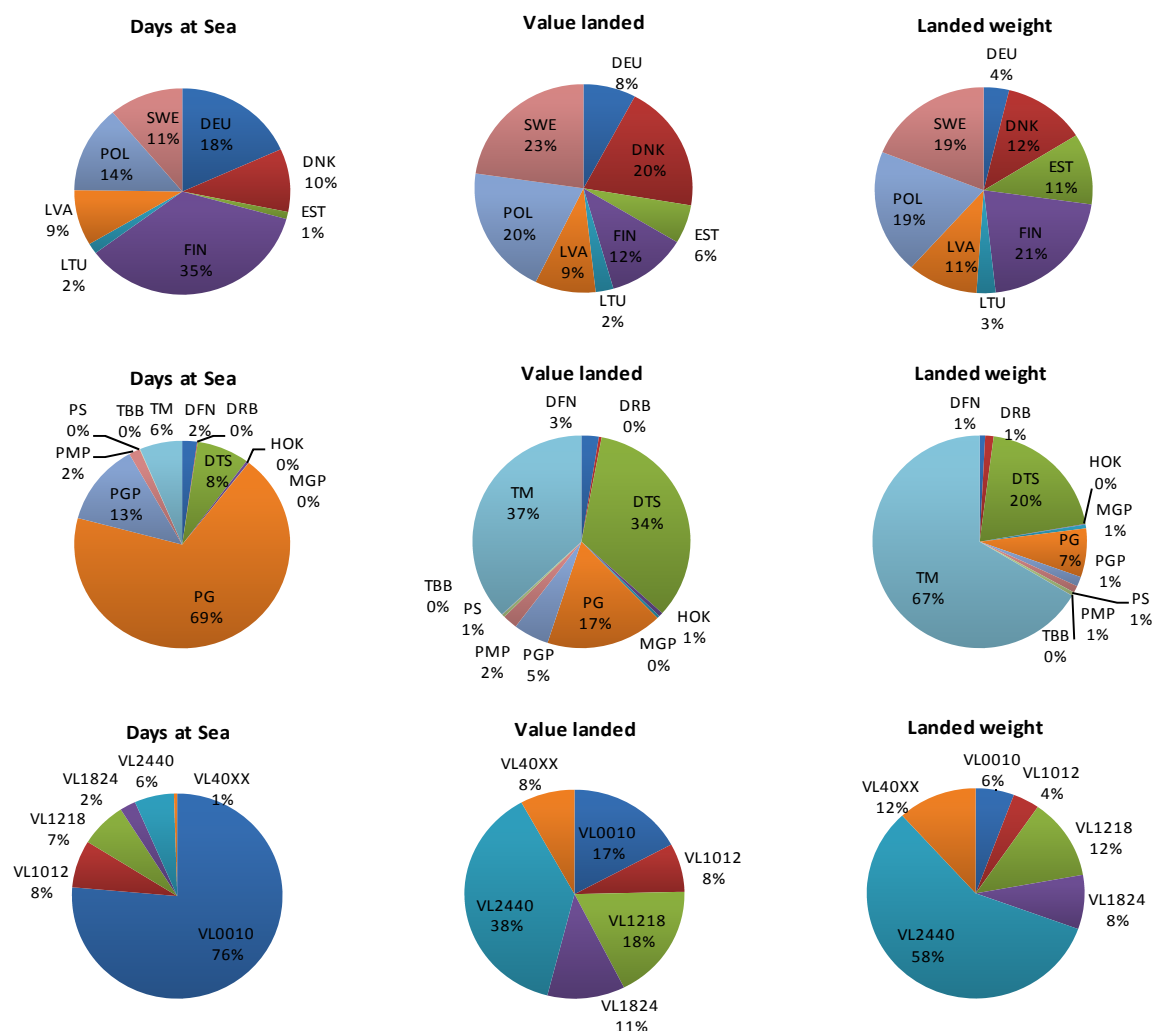


Figure 4.1.1 EU Baltic Sea fleet effort and landings by MS, gear type and length class in 2011  
(Source: EU Member States DCF data submissions)

Sweden, Denmark and Poland amounted for around 63% of the total value of landings in the Baltic Sea. Sweden (€52 million), Poland (€46 million) and Denmark (€45.5 million) were followed by Finland, Latvia and Germany. The total value of landings in the Baltic Sea increased 13% between 2009 and 2011.

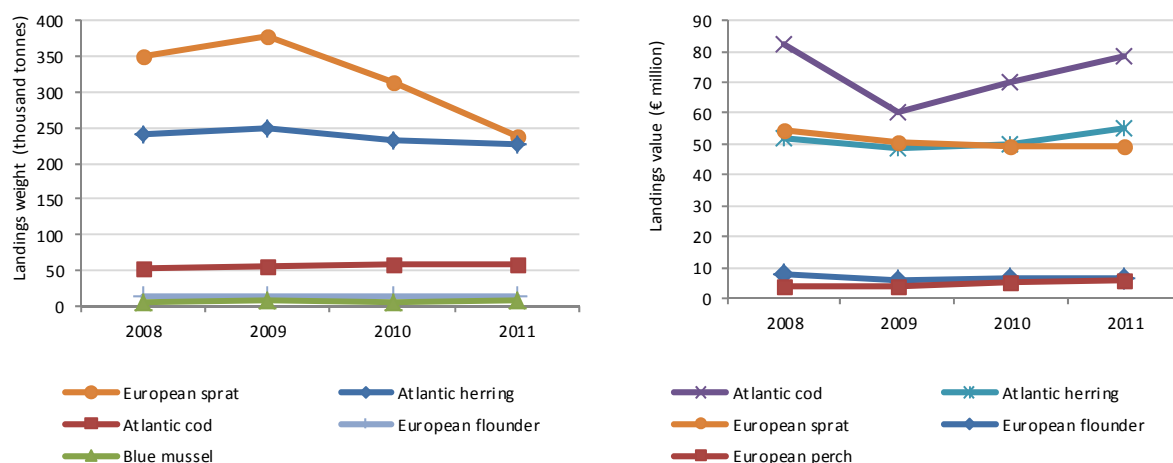


Figure 4.1.2 EU Baltic Sea fleet volume and value of top 5 species landed  
(Source: EU Member States DCF data submissions)

In terms of landings composition, in 2011 sprat (238 thousand tonnes), herring (228 thousand tonnes), cod (60 thousand tonnes) and flounder (14 thousand tonnes) were the most common species landed in term of tonnage. Cod accounted for the highest value of landings in 2011 (€78 million), followed by herring (€55 million), and then sprat (€49 million) (fig. 4.1.2). The volume of sprat landed in the Baltic Sea decreased slightly from 2009 to 2011, while the value of sprat landed remained relatively stable. The general reason of the Baltic sprat volumes decreasing was the quotas reduction by 28% for the Baltic Sea Subdivisions 22-32. The value of cod landings increased 23% between 2009 and 2011.

#### 4.1.2. EU Baltic Sea fleet economic performance

There were 32 fleet segments operating in the Baltic Sea area in 2010. The economic data is collected at fleet segment level and, therefore, does not relate solely to fishing activity in the Baltic Sea. From all the fleets operating in the region, half of their landings volume and two thirds of the value comes from other regions, in particular the North Sea.

The total amount of income generated by Baltic Sea countries in 2010 was €820 million, 84% of which was split between three countries - Denmark (€405 million), Germany (€146 million) and Sweden (€142 million). However these fleet segments also operated in other regions where most of the landings value was generated.

Among the countries that operated in the Baltic Sea, the Danish fleet generated the highest GVA (€267 million) and net profit (€59 million). Danish, German and Polish fleets were the most profitable. Finland and Sweden made negligible losses of €1.6 and €0.9 million, respectively.

Pelagic and demersal trawl fleet segments were the most important fleets in the Baltic Sea region in 2010. The most efficient vessels, measured in terms of value landed, were vessels 24-40m and 12-18m in length, with the shares of 38% and 18%, respectively. Pelagic trawler fleets produced the highest landings values in most countries except Denmark, Lithuania and Germany. In pelagic fisheries Swedish trawlers produced the highest landings value in the Baltic Sea followed by Finnish,



Polish and Latvian pelagic trawlers. For the demersal trawlers, Danish fleets accounted for the highest landings value followed by Swedish and then Polish fleets.

Among the fleets that operated exclusively in the Baltic Sea, Latvian pelagic trawlers generated the highest GVA, followed by Polish and Finnish pelagic fleets. Polish pelagic trawlers were the most profitable segment of those operating only in the Baltic Sea followed by the Latvian fleet.

The top three gears in relative profitability were demersal trawlers (23%), purse seiners (15%) and polyvalent active gears (12%). The lowest profits were made by Finnish passive gears, Polish hooks and Latvian polyvalent passive gear vessels. More recently, the coastal zone fishery has suffered negative impacts from seals.

Table 4.1.1 EU Baltic Sea fleet economic performance by Member State in 2010

Member State	No. of vessels in Area 27	FTEs in Area 27	Baltic Sea days at sea (1000)	Baltic Sea days at sea as % of total days in Area 27	Baltic Sea volume landed (1000 tons)	Baltic Sea volume landed as % of volume landed in Area 27	Baltic Sea Value landed (€ million)	Baltic Sea value as % of total value landed in Area 27	Total income (€ million) in Area 27	Direct subsidies (€ million) in Area 27	Direct subsidies as % of total income in Area 27	Gross value added (GVA) (€ million) in Area 27	Gross value added (GVA) as % of total income in Area 27	Gross profit (€ million) in Area 27	Gross profit as % of total income in Area 27	Net profit (excluding subsidies) (€ million) in Area 27	Net profit (excluding subsidies) as % of total income in Area 27	Crew wage per FTE (€ 1000)
Germany	1268	1276	77.8	67.5%	25.6	27.7%	17.6	12.5%	145.7	1.3	0.9%	76.2	52.3%	32.7	22.4%	18.9	13.0%	26.7
Denmark	1639	1807	39.6	32.9%	84.2	10.8%	42.3	11.2%	404.7	0.1	0.0%	267.0	66.0%	147.4	36.4%	58.8	14.5%	43.7
Estonia	933	521	5.2	100.0%	81.3	100.0%	13.1	100.0%	15.1	2.0	13.6%	7.3	48.4%	2.7	18.0%	0.5	3.0%	8.7
Finland	1619	313	149.7	100.0%	122.1	100.0%	26.6	100.0%	31.6	1.5	4.6%	12.2	38.7%	2.5	7.9%	-1.6	-5.2%	10.2
Lithuania	99	212	7.2	87.7%	15.5	97.0%	6.1	89.5%	7.3	0.1	1.4%	2.1	28.8%	0.9	12.9%	0.4	5.0%	5.3
Latvia	771	521	43.6	100.0%	74.0	100.0%	21.0	100.0%	21.9	0.0	0.2%	11.5	52.4%	8.2	37.6%	1.6	7.1%	6.2
Poland	721	1268	60.9	99.5%	110.1	95.4%	40.0	100.0%	55.0	14.8	27.0%	21.8	39.6%	10.4	18.9%	6.2	11.2%	9.0
Sweden	1055	990	47.4	55.9%	134.2	65.6%	46.7	45.2%	142.3	0.0	0.0%	72.7	51.1%	44.7	31.4%	3.0	2.1%	13.8

Note: excludes inactive vessels

(Source: EU Member States DCF data submissions)

Table 4.1.2 EU Baltic Sea fleet economic performance by gear type in 2010

Gear type	No. of vessels in Area 27	FTEs in Area 27	Baltic Sea days at sea (1000)	Baltic Sea days at sea as % of total days in Area 27	Baltic Sea volume landed (1000 tons)	Baltic Sea volume landed as % of volume landed in Area 27	Baltic Sea Value landed (€ million)	Baltic Sea value as % of total value landed in Area 27	Total income (€ million) in Area 27	Direct subsidies (€ million) in Area 27	Direct subsidies as % of total income in Area 27	Gross value added (GVA) (€ million) in Area 27	Gross value added (GVA) as % of total income in Area 27	Gross profit (€ million) in Area 27	Gross profit as % of total income in Area 27	Net profit (excluding subsidies) (€ million) in Area 27	Net profit (excluding subsidies) as % of total income in Area 27	Crew wage per FTE (€ 1000)
DFN	2637	5811	11.8	6.2%	6.8	10.6%	7.8	3.7%	286.7	4.1	1.4%	168.4	58.7%	43.6	15.2%	12.7	4.4%	20.4
DRB	1109	2195	0.5	0.7%	7.0	6.0%	1.2	0.8%	210.2	2.9	1.4%	109.2	52.0%	36.4	17.3%	-11.0	-5.2%	31.8
DTS	2792	14276	32.8	7.8%	130.4	10.6%	67.8	5.1%	1804.5	33.5	1.9%	858.5	47.6%	372.5	20.6%	157.3	8.7%	31.7
FPO	3655	4447	0.0	0.0%	0.0	0.0%	0.0	0.0%	263.5	4.2	1.6%	160.2	60.8%	77.2	29.3%	44.9	17.0%	16.3
HOK	1250	3300	2.2	2.3%	0.7	2.7%	1.7	2.0%	152.0	4.3	2.8%	83.2	54.8%	11.4	7.5%	0.0	0.0%	18.3
MGP	144	306	0.1	0.7%	3.6	9.6%	0.7	1.9%	38.5	0.1	0.4%	20.4	53.1%	6.3	16.3%	2.7	7.1%	46.2
PG	4841	2719	291.9	92.3%	44.2	92.5%	36.1	70.8%	66.6	8.3	12.4%	26.2	39.3%	1.0	1.6%	-12.9	-19.4%	3.1
PGP	3571	5185	57.8	28.2%	7.6	26.2%	11.4	14.8%	135.5	1.0	0.7%	79.8	58.9%	19.8	14.6%	1.6	1.2%	8.8
PMP	1627	9818	6.4	4.7%	6.2	12.5%	4.6	5.5%	244.3	0.5	0.2%	155.4	63.6%	21.0	8.6%	-8.1	-3.3%	7.4
PS	290	5842	0.1	0.3%	0.6	0.1%	0.2	0.1%	412.1	8.1	2.0%	245.5	59.6%	102.4	24.8%	66.3	16.1%	23.8
TBB	739	2337	0.1	0.1%	0.1	0.1%	0.1	0.0%	396.4	5.9	1.5%	169.4	42.7%	65.5	16.5%	28.5	7.2%	37.8
TM	449	2209	27.7	58.6%	439.8	45.7%	81.9	23.5%	408.9	5.8	1.4%	179.7	44.0%	83.5	20.4%	-14.3	-3.5%	42.7

(Source: EU Member States DCF data submissions)

Table 4.1.3 EU Baltic Sea fleet economic performance by fleet segment in 2010

Fleet segment	No. of vessels in Area 27	FTEs in Area 27	Baltic Sea days at sea (1000)	Baltic Sea days as % of total days in Area 27	Baltic Sea volume landed (1000 tons)	Baltic Sea volume landed as % of volume in Area 27	Baltic Sea Value landed (€ million)	Baltic Sea value as % of total value in Area 27	Total income (€ million) in Area 27	Direct subsidies (€ million) in Area 27	Direct subsidies as % of total income in Area 27	Gross value added (GVA) (€ million) in Area 27	Gross value added (GVA) as % of total income in Area 27	Gross profit (€ million) in Area 27	Gross profit as % of total income in Area 27	Net profit (excluding subsidies) (€ million) in Area 27	Net profit (excluding subsidies) as % of total income in Area 27	Crew wage per FTE (€ 1000)
DEU DTS VL1012	15	7	1.4	100%	1.7	100%	1.0	100%	1.2	0.0	1.5%	0.5	43.8%	0.2	20.1%	0.1	12.3%	13.4
EST PG VL0010	791	207	n/a	n/a	3.4	100%	2.4	100%	2.6	0.2	7.8%	1.3	50.3%	0.6	23.6%	0.3	9.6%	3.4
EST PG VL1012	90	102	n/a	n/a	7.8	100%	1.0	100%	1.1	0.1	8.9%	0.6	49.0%	0.2	22.0%	0.1	5.1%	3.0
EST TM VL1218	13	10	1.0	100%	3.9	100%	0.5	100%	0.5	0.2	43.2%	0.2	32.6%	0.1	17.9%	0.0	5.1%	7.4
EST TM VL2440	35	202	4.2	100%	66.1	100%	9.2	100%	10.8	1.5	13.9%	5.2	48.7%	1.7	16.1%	0.1	1.1%	17.2
FIN DFN VL1218	9	1	0.3	100%	0.1	100%	0.2	100%	0.2	0.0	0.1%	0.1	59.9%	0.1	36.7%	0.0	13.4%	1.8
FIN PG VL0010	1512	210	143.0	100%	7.8	100%	8.1	100%	12.4	1.4	11.0%	4.9	39.3%	-1.4	-11.1%	-2.5	-20.4%	3.1
FIN PG VL1012	47	10	2.1	100%	2.3	100%	0.8	100%	1.3	0.1	6.9%	0.7	53.3%	0.3	25.4%	0.1	6.1%	8.6
FIN TM VL1218	22	8	0.9	100%	9.2	100%	1.5	100%	1.3	0.0	0.2%	0.8	57.8%	0.5	38.6%	0.3	21.2%	1.4
FIN TM VL1824	12	13	0.9	100%	15.7	100%	2.4	100%	2.0	0.0	0.0%	1.3	65.9%	0.6	31.6%	0.3	15.2%	48.4
FIN TM VL2440	17	71	2.4	100%	87.1	100%	13.7	100%	14.4	0.0	0.0%	4.5	31.2%	2.3	16.2%	0.2	1.5%	25.6
LTU DFN VL0010	63	25	3.9	100%	0.2	100%	0.1	100%	0.2	0.1	30.3%	0.1	26.3%	0.0	-4.0%	0.0	-14.1%	1.4
LTU DFN VL1218	14	25	0.9	100%	0.5	100%	0.6	100%	0.5	0.0	0.0%	0.2	41.6%	0.1	23.5%	0.1	16.1%	3.7
LTU DTS VL2440	18	130	1.5	100%	3.1	100%	3.4	100%	4.3	0.0	0.3%	1.3	30.9%	0.6	12.7%	0.2	5.5%	6.1
LTU TM VL2440	4	32	0.8	100%	11.8	100%	1.9	100%	2.2	0.0	0.7%	0.5	21.8%	0.3	12.4%	0.1	3.2%	6.4
LVA DFN VL2440	18	42	1.9	100%	2.4	100%	3.2	100%	3.3	0.0	0.0%	2.0	60.2%	1.6	49.5%	0.6	18.3%	8.3
LVA PGP VL0010	687	329	34.2	100%	2.6	100%	1.2	100%	1.3	0.0	0.0%	1.1	87.8%	1.0	79.6%	-0.3	-25.2%	0.2
LVA TM VL1218	17	31	2.6	100%	10.4	100%	2.4	100%	2.8	0.0	0.0%	1.1	39.4%	0.4	14.1%	-0.4	-14.0%	23.3
LVA TM VL2440	49	119	4.9	100%	58.7	100%	14.2	100%	14.5	0.0	0.2%	7.3	50.2%	5.2	35.9%	1.7	11.6%	17.4

(Source: EU Member States DCF data submissions)

Table 4.1.3 EU Baltic Sea fleet economic performance by fleet segment in 2010 contd.

Fleet segment	No. of vessels in Area 27	FTEs in Area 27	Baltic Sea days at sea (1000)	Baltic Sea days as % of total days in Area 27	Baltic Sea volume landed (1000 tons)	Baltic Sea volume landed as % of volume landed in Area 27	Baltic Sea Value landed (€ million)	Baltic Sea value as % of total value landed in Area 27	Total income (€ million) in Area 27	Direct subsidies (€ million) in Area 27	Direct subsidies as % of total income in Area 27	Gross value added (GVA) (€ million) in Area 27	Gross value added (GVA) as % of total income in Area 27	Gross profit (€ million) in Area 27	Gross profit as % of total income in Area 27	Net profit (excluding subsidies) (€ million) in Area 27	Net profit (excluding subsidies) as % of total income in Area 27	Crew wage per FTE (€ 1000)
POL DFN VL1218	22	116	2.8	100%	2.1	100%	2.4	100%	2.8	0.3	11.9%	1.6	55.8%	0.7	25.1%	0.5	18.6%	7.5
POL DTS VL1012	12	19	0.8	100%	0.6	100%	0.6	100%	0.9	0.3	31.1%	0.3	30.7%	0.2	16.6%	0.1	11.7%	6.8
POL DTS VL1218	47	141	4.7	100%	7.2	100%	5.1	100%	6.7	1.6	24.4%	2.8	41.9%	1.8	26.6%	1.2	18.6%	7.3
POL DTS VL1824	20	57	2.1	100%	5.4	100%	2.5	100%	3.4	0.9	26.3%	1.5	42.9%	0.9	27.6%	0.7	19.8%	9.2
POL DTS VL2440	10	29	0.6	100%	3.2	100%	1.5	100%	1.8	0.3	18.4%	1.0	52.5%	0.7	39.8%	0.5	29.1%	7.9
POL HOK VL1218	37	75	2.0	100%	0.6	100%	1.5	100%	3.4	1.9	55.9%	0.6	18.4%	-0.3	-8.0%	-0.6	-17.0%	12.0
POL PG VL0010	472	320	35.8	100%	8.3	100%	7.3	100%	12.1	4.8	39.8%	4.8	39.3%	2.1	16.9%	1.3	10.5%	8.5
POL PG VL1012	54	99	5.0	100%	2.7	100%	2.4	100%	3.8	1.4	36.5%	1.5	39.1%	0.9	22.4%	0.5	14.2%	6.4
POL TM VL2440	46	411	6.9	100%	79.9	100%	16.7	100%	20.0	3.2	16.2%	7.8	39.0%	3.4	17.2%	1.8	9.2%	10.6
DEU PG VL0010	830	579	63.6	100%	4.8	100%	5.3	100%	5.6	0.1	1.8%	2.5	44.9%	1.5	26.6%	0.8	14.2%	1.1
DEU PG VL1012	72	40	6.0	91%	3.0	98%	2.4	97%	3.1	0.2	6.5%	0.9	29.5%	0.0	-1.0%	-0.3	-10.2%	10.5
DEU DTS VL1218	37	29	3.5	95%	5.9	99%	3.0	90%	4.3	0.2	3.9%	2.3	53.3%	0.8	18.4%	0.4	8.9%	29.3
SWE DFN VL1218	14	24	1.2	88%	0.8	94%	0.8	73%	2.0	0.0	0.0%	0.7	34.9%	0.1	5.9%	-0.3	-17.1%	14.4
SWE TM VL2440	11	61	1.3	68%	34.9	68%	7.1	68%	25.3	0.0	0.0%	14.3	56.7%	11.8	46.6%	5.6	22.3%	41.5
SWE TM VL40XX	11	118	1.7	67%	62.2	69%	12.3	63%	38.6	0.0	0.0%	22.6	58.6%	18.8	48.7%	4.1	10.5%	24.7
DNK PGP VL1012	65	47	4.9	69%	1.6	65%	2.8	57%	4.7	0.0	0.0%	2.3	48.7%	-0.1	-1.2%	-1.0	-20.9%	9.8
SWE PG VL1012	141	82	7.4	70%	2.2	79%	2.6	54%	6.2	0.0	0.0%	2.9	47.7%	0.9	15.0%	-2.2	-35.6%	4.6
DNK PMP VL1012	29	25	1.9	67%	1.0	64%	1.1	53%	3.0	0.0	0.0%	1.6	54.3%	0.4	12.0%	-0.6	-20.6%	0.4
DNK DTS VL1012	16	5	0.5	56%	0.4	36%	0.5	51%	0.4	0.0	0.0%	0.2	45.6%	-0.1	-27.9%	-0.2	-43.6%	0.0
SWE PG VL0010	625	302	28.8	63%	1.9	72%	3.9	50%	9.6	0.0	0.0%	4.0	41.9%	-3.4	-34.9%	-8.9	-92.4%	1.4

(Source: EU Member States DCF data submissions)

## 4.2 Mediterranean and Black Sea

### 4.2.1 EU Mediterranean and Black Sea Fleet General Overview

EU Member States fishing in Mediterranean waters include Spain, France, Italy, Slovenia, Greece, Malta, Cyprus and Portugal. Bulgaria and Romania fish exclusively in the Black sea. In terms of data availability, Greece did not submit any data. Spain did not submit any data on volume and value of landings by species, fishing effort or capacity. Slovenia did not submit data on effort and landings for 2008 and 2009 for the Mediterranean area. For Portugal, only data on landings (volume and value) and effort for 2010 (and very few data for 2008) has been submitted while information on the fleet consistency is completely missing. As a result of missing Greek and Spanish data (known to be major Mediterranean players), Italian production appears to represent the major part of the totals (see following graphs). A fully comprehensive and realistic analysis could therefore not be carried out.

Based on the submitted data, the European fleet fishing in the Mediterranean and Black Sea consisted of around 21,179 vessels, with a total gross tonnage (GT) of 228 thousand tonnes and total kilowatts (kW) of 1.43 million in 2010. The Italian fleet accounted for around 71% of the total number of vessels followed, at a very long distance, by the Bulgarian fleet (13%). When analysing the distribution of gross tonnage among countries, Italy still has the top position (80%), while Bulgaria shifts to fourth position after France and Malta. These positions are confirmed when analysing the power in terms of kW. This means that Bulgarian vessels have a smaller average dimension (4 GT and 29 kW on average) if compared with Italian vessels, and especially with the French vessels (15 GT and 100 kW on average).

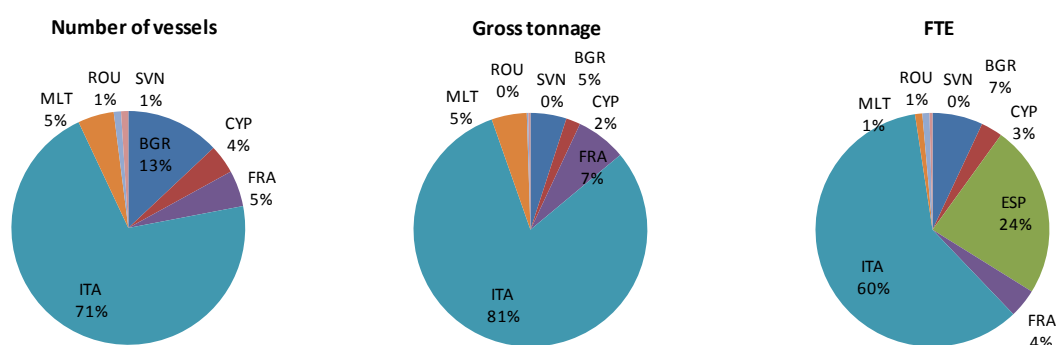


Figure 4.2.1 EU Mediterranean and Black Sea fleet capacity and employment 2010  
(Source: EU Member States DCF data submissions)

The oldest fleet is the Slovenian fleet, with vessels averaging 35 years in 2010, followed by the French and the Maltese fleets with average ages of 29 years and 28 years, respectively in 2010. Based on expert knowledge and on available data, it can be said that the Portuguese fishery in the Mediterranean area is carried out by very few boats: only 2-3 vessels (polyvalent and long-lines), registered in ports of the Azores Island and Mainland, operating in this area only in specific seasons catching shrimps.

Employment data submitted suggests that the total fishers employed and corresponding FTEs, harmonised and national, in the Mediterranean and Black Sea were 46,472, 31,900 and 35,794 in 2010, respectively. The Italian fleet accounted for around 60% of the total FTEs (62% for total employed), followed by the Spanish fleet (24% and 22% of total employed and FTEs) and then the Bulgarian fleet (7%). Based on the available data, a vessel operating in the region (excluding the Mediterranean Spanish

vessels for which 2010 capacity data have not been provided) will employ on average 2 fishermen, corresponding to one FTE per vessel.

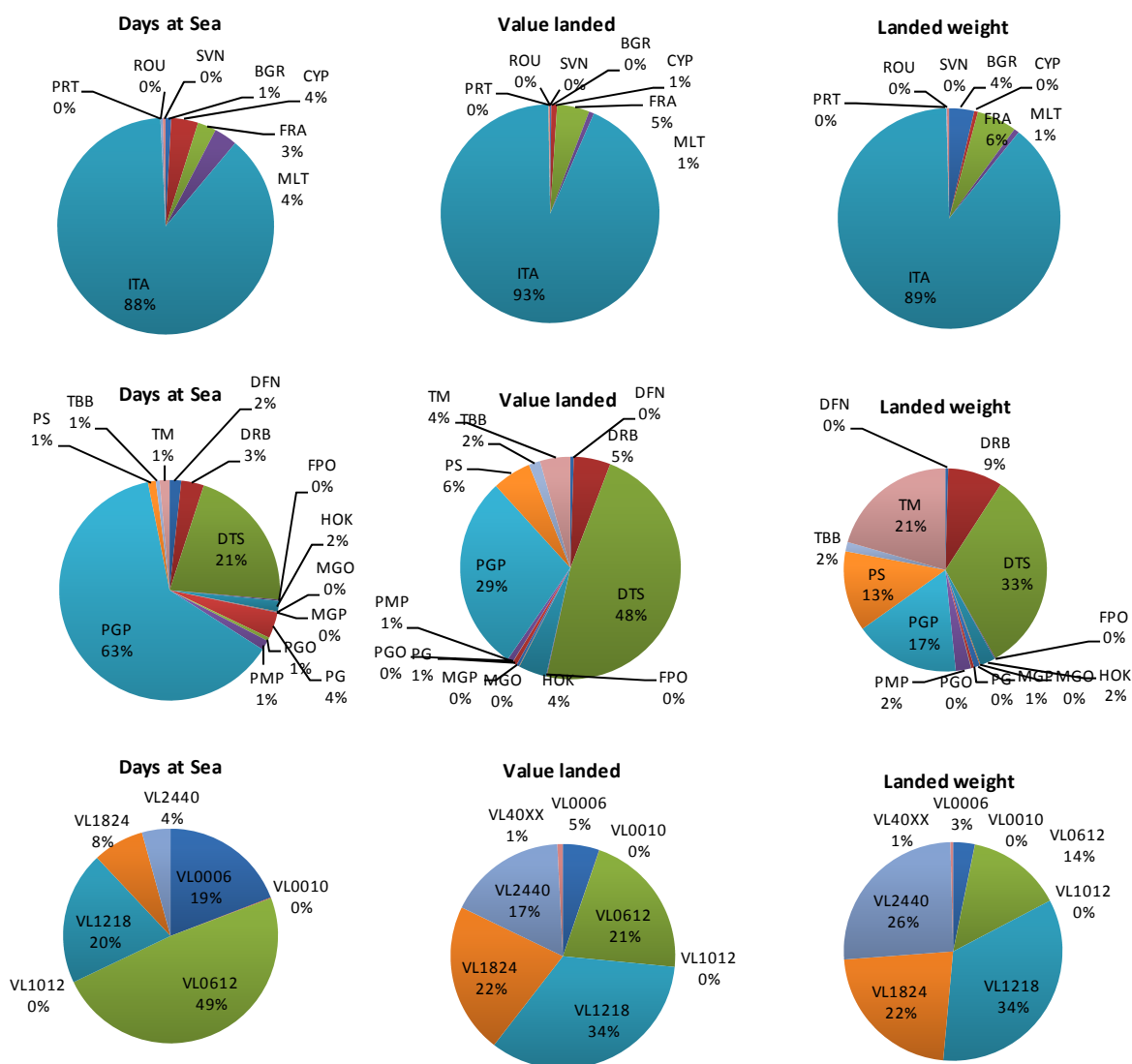


Figure 4.2.2 EU Mediterranean and Black Sea fleet effort and landings in 2010  
(Source: EU Member States DCF data submissions)

The Mediterranean and Black Sea fleet (with the exception of Spain and Greece that did not submit data) spent a total of around 2 million days at sea in 2010, and an average of 89 days per vessel. Of the countries who submitted data, the Italian fleet accounted for 88% of the total number of days, followed, at a distance, by the Cypriot and Maltese fleets (both 4% of the total). Based on the data submitted, the total energy (fuel) consumption amounts to 453 million litres in 2010, however because of the lack of data from Greece and Spain in reality the total should be significantly higher. Of the Member States who did provide data, the Italian fleet consumes, on total, the largest amount of fuel (89%) while, on average, the French vessels are the least fuel efficient (35 thousand litres per vessel in 2010), followed by the Italian fleet (27 thousand litres).

Based on the data submitted, the total volume and value of landings achieved by the Mediterranean and Black Sea fleet in 2010 (excluding Greece and Spain) were 1,184 thousand tonnes and €251 million respectively. It should again be outlined that the lack of Spanish and Greek data does not allow for a very realistic analysis of the Euro-Mediterranean fishery fleet production. The Italian fleet produced the highest volume of landings in the region (93%), followed by the French fleet (5%). The Italian fleet also produced the highest value of landings (89%), followed, again, by the French fleet (6%).

The passive gears are the most important gears in terms of effort, accounting for 63% of the total and followed by the demersal trawlers (21%). Demersal trawlers are, instead, the most important in terms of both weight and value of landings (33% and 48%, respectively).

The 2010 average first-sale price was 4.71 €/kg, with the highest value registered for Portuguese landings (7.81 €/kg) and the lowest for Bulgarian landings (0.23 €/kg). Based on expert knowledge the Bulgarian average price should be very similar to Romanian values (around 2 €/kg), taking into account the common features of the two fishing fleets, exploiting more or less the same stocks. The inconsistency in the average prices should be attributed, accordingly to the experts' knowledge, to the lack of data (submitted) on Bulgarian landings (turbot data are missing for the period 2008-2010). Furthermore, for the sake of homogeneity of the analysis, it should be said that, even if the Mediterranean and Black sea are merged into the same FAO area (37), the respective fisheries are very different, especially from a biological point of view. The main species exploited in the Black sea (sprat and turbot) do not have the same importance for other Med fleets. Furthermore, we should underline that according to EC policies a TAC system was introduced just 3 years ago for Romanian and Bulgarian fleets exploiting sprat and turbot (TACs are usually not applied and applicable in the Mediterranean fisheries).

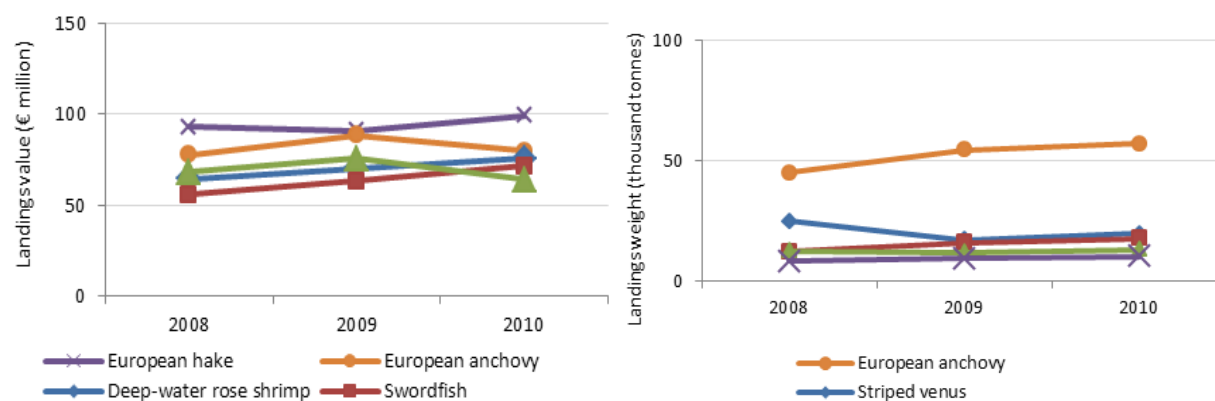


Figure 4.2.3 EU Med. and Black Sea fleet volume and value of top 8 species landed  
(Source: EU Member States DCF data submissions)

Excluding data on the Greek and Spanish fleet, the 5 most important species landed by the EU Mediterranean and Black Sea fleets in terms of volume in 2010 were European anchovy, sardine (pilchards), deep-water rose shrimp, clams (striped venus) and European hake. Anchovy is the top species with a volume, in 2010, of 57 thousand tonnes, 23% of the total amount of landings in 2010 and an increase of around 26% in the period 2008-2010 (fig. 4.2.3 left). Anchovy is the most important species in the Mediterranean as it has the greatest influence on the total volume of production.

The second most important species in terms of volume landed is clams. In 2010 the total volume of clams landed was around 19 thousand tonnes (8% of total landings). This species is mainly landed in the

Adriatic Sea by Italian dredgers. Sardines (European pilchards) were the third most important species in terms of volume landed in 2010, amounting to 17.7 thousand tonnes (7% of total landings).

Excluding data on the Greek and Spanish fleets, the five most important species landed by the EU Mediterranean and Black Sea fleets in terms of value in 2010 were hake, deep water rose shrimp, cuttlefish, anchovy, and swordfish. In 2010 the value of hake landed was the highest of all species, amounting to €99 million, 8% of the total value of landings in 2010 and an increase of 7% in the period 2008-2010 (fig. 4.2.3 right). The second most important species in terms of value is anchovy, which amounted to €79 million (7% of the total value) in 2010. Deep water rose shrimp were the third most important species in terms of value in 2010, amounting to €75 million (6% of the total value). None of these species account for more than 8% of the total value of landings, highlighting the fact that the Mediterranean and Black Sea fisheries are highly diversified and not overly dependent on any one particular species at the regional level. Additionally, it is interesting to note that European hake is targeted by several different segments of the fleet using different gear types.

#### **4.2.2 EU Mediterranean and Black Sea fleet economic performance**

Under the DCF, economic data is requested at supra region level. As the Mediterranean and Black Sea region falls under one specific supra region (Area 37) it is possible to calculate profitability indicators for fleets that operate solely within the region. Tables 4.2.1, 4.2.2 and 4.2.3 contain a summary of economic performance of the Mediterranean and Black Sea fleet by Member State, gear type and fleet segments respectively. Taking into account that for some MS data are not available for all fleet segments, this analysis is mostly focused on table 4.2.1.

The total income of the fleet operating in Area 37 was equal, in 2010, to €1 596 million. Direct subsidies accounted for €33 million, equal to 2% of total income. Direct subsidies as a proportion of total income largely varies among MS, with the highest share for Cyprus (16.3%) and the lowest for France (0.2%).

The total GVA of Area 37 was equal to €864 million, representing 54% of total income. Two MS (Bulgaria and Cyprus) show a negative GVA, meaning that operating costs (excluding labour costs) exceeded incomes. Again, the share largely varies among MS, with the highest share for France (58%) and the lowest (positive) for Malta (13.5%). The lower the share, the higher the incidence of operating costs (excluding the remuneration of labour).

The gross profit of the area was equal, in 2010, to €332 million, amounting to 21% of total income and 38% of GVA, indicating that more than a half (62%) of the GVA is destined to the remuneration of the labour factor. The large differences between MS give an idea on how the GVA is used to remunerate the production factors in the area (as mentioned above, more than a half is destined to the labour factor in most of the MS).

The net profit of Area 37 is equal to €75 million in 2010 (5% of total income excluding subsidies). It is negative for five MS and positive for the rest (Italy, France and Romania). The average value of the final result of the production largely varies among the Med MS. On average a vessel produced, in 2010, a net profit of €3,500. The highest value is observable for France, with about €19,400. The lowest positive value is registered for Romania (€158) while the lowest negative was recorded for Maltese vessels (-€20,000).

In terms of crew remuneration, the average wage per FTE for Med fisherman is €12,200 per annum. Again the difference among MS is large: the highest average wage was observed for French fishermen (€35,000) and the lowest for Romanian (€486).



Table 4.2.2 suggests that dredges were the most profitable gear type in the Mediterranean and Black Sea region in 2010, with GVA and profits as a proportion of total income of 75% and 42% respectively. Crew wage per FTE was around €52,300 for this gear type in 2010, the highest at fleet segment level.

Table 4.2.1 EU Med. &amp; Black Sea economic performance fleet by MS in 2010

Member State	Number of vessels in Med. & Black Sea	Employment (FTE) in Area 37	Med. & Black Sea days at sea (1000)	Med. & Black Sea days at sea as % of total days in all areas	Med. & Black Sea volume landed (1000 tons)	Med. & Black Sea volume landed as % of total volume landed in all areas	Med. & Black Sea Value landed (€ million)	Med. & Black Sea % of total value landed in all areas	Total income (€ million) in Area 37	Direct subsidies (€ million) in Area 37	Direct subsidies as % of total income in Area 37	Gross value added (GVA) (€ million) in Area 37	Gross value added (GVA) as % of total income in Area 37	Gross profit (€ million) in Area 37	Gross profit as % of total income in Area 37	Net profit (excluding subsidies) (€ million) in Area 37	Net profit (excluding subsidies) as % of total income in Area 37	Crew wage per FTE (€ 1000) in Area 37
Bulgaria	1383	2305	16.0	100.0%	9.2	100.0%	2.2	100.0%	7.7	0.8	10.8%	-3.3	-42.9%	-5.8	-75.3%	-6.8	-88.2%	0.9
Cyprus	913	911	75.6	100.0%	1.4	100.0%	10.2	100.0%	12.2	2.0	16.3%	-12.6	-103.4%	-14.2	-116.1%	-20.7	-169.8%	0.8
Spain	n/a	8492	n/a	n/a	n/a	n/a	n/a	n/a	328.9	7.6	2.3%	170.3	51.8%	12.9	3.9%	-19.9	-6.0%	14.6
France	1118	1190	53.0	10.5%	14.7	3.3%	56.5	6.1%	109.8	0.2	0.2%	63.9	58.2%	21.7	19.8%	21.7	19.8%	35.4
Italy	13268	22002	1667.8	100.0%	223.0	99.2%	1102.8	98.9%	1124.9	22.2	2.0%	643.6	57.2%	327.0	29.1%	115.2	10.2%	12.0
Malta	998	256	65.4	100.0%	1.8	100.0%	8.8	100.0%	9.8	0.6	5.9%	1.3	13.5%	-8.8	-89.7%	-16.3	-166.5%	9.5
Romania	206	403	6.5	100.0%	0.2	100.0%	0.5	100.0%	0.5	0.0	0.0%	0.2	50.1%	0.0	9.7%	0.0	6.7%	0.5
Slovenia	91	82	7.7	100.0%	0.8	100.0%	2.0	100.0%	2.4	0.0	0.0%	0.6	25.6%	-0.7	-28.0%	-0.9	-38.4%	13.6

note: excludes inactive vessels

(Source: EU Member States DCF data submissions)

Table 4.2.2 EU Med. &amp; Black Sea economic performance fleet by gear type in 2010

Gear type	Number of vessels in Med. & Black Sea	Employment (FTE) in Area 37	Med. & Black Sea days at sea (1000)	Med. & Black Sea days at sea as % of total days in all areas	Med. & Black Sea volume landed (1000 tons)	Med. & Black Sea volume landed as % of total volume landed in all areas	Med. & Black Sea Value landed (€ million)	Med. & Black Sea % of total value landed in all areas	Total income (€ million) in Area 37	Direct subsidies (€ million) in Area 37	Direct subsidies as % of total income in Area 37	Gross value added (GVA) (€ million) in Area 37	Gross value added (GVA) as % of total income in Area 37	Gross profit (€ million) in Area 37	Gross profit as % of total income in Area 37	Net profit (excluding subsidies) (€ million) in Area 37	Net profit (excluding subsidies) as % of total income in Area 37	Crew wage per FTE (€ 1000) in Area 37
DFN	1413	474	32.4	14.6%	1.2	1.8%	5.8	2.6%	33.2	0.0	0.0%	25.9	78.2%	13.4	40.3%	13.3	40.1%	26.2
DRB	711	405	62.9	46.9%	21.8	15.7%	63.1	30.3%	63.5	0.1	0.2%	47.8	75.2%	26.6	41.9%	13.5	21.3%	52.3
DTS	2713	11666	403.7	48.6%	82.0	6.2%	563.5	29.3%	774.0	25.6	3.3%	364.4	47.1%	141.0	18.2%	9.6	1.2%	18.0
FPO	173	68	3.5	1.3%	0.4	0.5%	1.3	0.7%	2.6	0.0	0.0%	2.0	75.6%	0.5	18.1%	0.4	17.1%	21.3
HOK	468	1732	29.3	20.6%	6.0	11.8%	48.0	26.3%	77.2	0.9	1.2%	40.0	51.9%	2.1	2.7%	-10.4	-13.4%	19.2
MGO	37	43	1.3	5.9%	0.4	34.9%	1.1	16.9%	1.6	0.0	0.0%	1.0	61.5%	-0.2	-14.0%	-0.6	-36.9%	16.4
MGP	11	42	2.0	8.8%	2.3	5.7%	4.7	11.3%	5.6	0.1	1.3%	1.7	29.8%	-0.2	-3.0%	-0.2	-3.0%	43.6
PG	698	3105	72.1	18.6%	1.1	2.3%	7.5	12.9%	13.8	1.9	13.5%	-8.8	-63.8%	-9.8	-70.8%	-12.8	-92.2%	0.1
PGO	524	169	9.7	56.1%	0.2	4.4%	0.5	23.9%	4.5	0.0	0.0%	2.2	48.4%	-0.4	-9.2%	-0.4	-9.2%	15.0
PGP	10022	11394	1188.4	85.3%	42.2	59.3%	339.4	81.6%	343.3	0.5	0.2%	225.6	65.7%	117.2	34.2%	58.2	16.9%	4.8
PMP	638	2396	27.4	16.7%	6.1	10.9%	9.6	10.1%	74.1	0.2	0.2%	44.6	60.3%	4.7	6.4%	-1.1	-1.5%	9.7
PS	282	3177	22.2	39.5%	32.1	6.2%	66.9	15.4%	127.1	1.4	1.1%	82.6	65.0%	23.1	18.2%	2.9	2.3%	17.0
TBB	72	320	10.3	9.0%	3.7	2.7%	19.5	4.9%	20.1	0.6	2.9%	9.5	47.0%	4.3	21.2%	-0.7	-3.6%	16.2
TM	214	652	27.5	34.8%	51.7	4.0%	52.5	10.7%	55.5	2.2	3.9%	25.6	46.2%	10.0	18.0%	0.8	1.4%	24.0

(Source: EU Member States DCF data submissions)

Table 4.2.3 EU Med. &amp; Black Sea economic performance fleet by fleet segment in 2010

Fleet segment	Number of vessels in Med. & Black Sea	Employment (FTE) in Area 37	Med. & Black Sea days at sea (1000)	Med. & Black Sea days at sea as % of total days in all areas	Med. & Black Sea volume landed (1000 tons)	Med. & Black Sea volume landed as % of total volume landed in all areas	Med. & Black Sea Value landed (€ million)	Med. & Black Sea as % of total value landed in all areas	Total income (€ million) in Area 37	Direct subsidies (€ million) in Area 37	Direct subsidies as % of total income in Area 37	Gross value added (GVA) (€ million) in Area 37	Gross value added (GVA) as % of total income in Area 37	Gross profit (€ million) in Area 37	Gross profit as % of total income in Area 37	Net profit (excluding subsidies) (€ million) in Area 37	Net profit (excluding subsidies) as % of total income in Area 37	Crew wage per FTE (€ 1000) in Area 37
BGR DFN VL0006	323	n/a	2.9	100%	0.04	100%	0.0	100.0%	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
BGR DFN VL0612	478	n/a	3.9	100%	0.01	100%	0.1	100.0%	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
BGR DFN VL1218	31	n/a	0.2	100%	0.01	100%	0.0	100.0%	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
BGR DFN VL1824	11	n/a	n/a	n/a	0.01	100%	0.0	100.0%	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
BGR FPO VL0612	49	n/a	n/a	n/a	0.08	100%	0.0	100.0%	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
BGR HOK VL0006	30	n/a	n/a	n/a	0.00	100%	0.0	100.0%	n/a	n/a	n/a	n/a	n/a	-0.5	n/a	-0.5	n/a	n/a
BGR HOK VL0612	53	n/a	n/a	n/a	0.05	100%	0.1	100.0%	n/a	n/a	n/a	n/a	n/a	-3.9	n/a	-4.3	n/a	n/a
BGR PG VL0612	n/a	2020	n/a	n/a	0.05	100%	0.1	100.0%	4.1	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
BGR PMP VL0006	79	n/a	1.1	100%	0.25	100%	0.0	100.0%	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
BGR PMP VL0612	164	n/a	3.5	100%	2.51	100%	0.4	100.0%	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
BGR PMP VL1218	94	135	1.0	100%	1.48	100%	0.2	100.0%	1.3	0.0	1.2%	0.2	14.4%	-0.2	-17.0%	-0.4	-31.0%	3.0
BGR PMP VL1824	13	81	0.4	100%	0.48	100%	0.1	100.0%	0.7	0.0	2.9%	0.1	8.2%	-0.2	-25.4%	-0.2	-36.3%	2.8
BGR TM VL1218	31	n/a	0.7	100%	0.28	100%	0.1	100.0%	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
BGR TM VL1824	14	n/a	0.5	100%	0.42	100%	0.1	100.0%	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
BGR TM VL2440	13	69	1.8	100%	3.39	100%	0.8	100.0%	1.2	0.8	67.7%	-0.6	-49.3%	-1.0	-85.4%	-1.2	-103.5%	6.1
CYP DTS VL1824	11	49	1.2	100%	0.28	100%	2.3	100.0%	2.3	0.1	2.7%	-0.9	-36.4%	-1.2	-49.8%	-3.5	-149.0%	6.4
CYP PG VL0012	500	701	66	100%	0.85	100%	7.03	100.0%	8.9	1.9	21.0%	n/a	n/a	n/a	n/a	n/a	n/a	n/a
CYP PGO VL0006	293	60	5.6	100%	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	-1.0	n/a	-1.0	n/a	n/a
CYP PGO VL0612	89	18	1.7	100%	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	-0.6	n/a	-0.6	n/a	n/a
CYP PGP VL1218	20	84	1.2	100%	0.25	100%	0.9	100.0%	1.0	0.0	5.1%	-1.2	-122.5%	-1.6	-165.2%	-2.8	-298.0%	4.9
ESP DTS VL0612	n/a	49	n/a	n/a	n/a	n/a	n/a	n/a	1.9	0.0	0.0%	1.2	63.4%	0.3	16.5%	0.2	12.9%	9.9
ESP DTS VL1218	n/a	575	n/a	n/a	n/a	n/a	n/a	n/a	37.9	3.0	8.0%	12.2	32.3%	0.3	0.8%	-2.5	-6.7%	16.0
ESP DTS VL1824	n/a	1851	n/a	n/a	n/a	n/a	n/a	n/a	76.5	2.0	2.7%	31.4	41.0%	4.1	5.4%	-7.7	-10.1%	13.1
ESP DTS VL2440	n/a	840	n/a	n/a	n/a	n/a	n/a	n/a	60.0	1.1	1.8%	30.2	50.3%	0.1	0.2%	-3.3	-5.6%	30.2
ESP HOK VL0612	n/a	481	n/a	n/a	n/a	n/a	n/a	n/a	14.3	0.0	0.0%	9.0	63.1%	1.9	13.0%	0.3	2.4%	11.6
ESP HOK VL1218	n/a	228	n/a	n/a	n/a	n/a	n/a	n/a	5.3	0.0	0.0%	1.9	35.9%	-5.6	-106.3%	-5.6	-106.3%	30.8
ESP HOK VL1824	n/a	103	n/a	n/a	n/a	n/a	n/a	n/a	5.4	0.1	2.4%	2.6	47.9%	0.3	5.8%	-0.4	-7.6%	17.4
ESP HOK VL2440	n/a	66	n/a	n/a	n/a	n/a	n/a	n/a	2.6	0.1	2.7%	1.1	42.3%	0.3	10.4%	0.1	3.2%	11.4
ESP PMP VL0612	n/a	1662	n/a	n/a	n/a	n/a	n/a	n/a	47.1	0.1	0.2%	31.3	66.5%	7.4	15.8%	5.1	10.9%	5.8

(Source: EU Member States DCF data submissions)

Table 4.2.3 EU Med. &amp; Black Sea economic performance fleet by fleet segment in 2010 contd 1.

Fleet segment	Number of vessels in Med. & Black Sea	Employment (FTE) in Area 37	Med. & Black Sea days at sea (1000)	Med. & Black Sea days at sea as % of total days in all areas		Med. & Black Sea volume landed (1000 tons)		Med. & Black Sea volume landed as % of total volume landed in all areas		Med. & Black Sea Value landed (€ million)	Med. & Black Sea as % of total value landed in all areas	Total income (€ million) in Area 37	Direct subsidies (€ million) in Area 37	Direct subsidies as % of total income in Area 37	Gross value added (GVA) (€ million) in Area 37	Gross value added (GVA) as % of total income in Area 37	Gross profit as % of total income in Area 37	Net profit (excluding subsidies) (€ million) in Area 37	Net profit (excluding subsidies) as % of total income in Area 37	Crew wage per FTE (€ 1000) in Area 37
				Med. & Black Sea days at sea as % of total days in all areas	Med. & Black Sea volume landed (1000 tons)	Med. & Black Sea volume landed as % of total volume landed in all areas	Med. & Black Sea as % of total value landed in all areas													
ESP PMP VL1218	n/a	269	n/a	n/a	n/a	n/a	n/a	n/a	n/a	15.3	0.0	0.0%	7.9	51.8%	-3.6	-23.3%	-5.6	-36.5%	40.3	
ESP PS VL0612	n/a	32	n/a	n/a	n/a	n/a	n/a	n/a	n/a	0.3	0.0	0.0%	0.2	58.8%	0.2	58.8%	0.1	56.9%	0.0	
ESP PS VL1218	n/a	726	n/a	n/a	n/a	n/a	n/a	n/a	n/a	21.3	0.4	1.8%	15.1	71.1%	2.0	9.2%	0.5	2.5%	13.3	
ESP PS VL1824	n/a	1351	n/a	n/a	n/a	n/a	n/a	n/a	n/a	27.0	0.7	2.6%	16.9	62.6%	3.4	12.4%	-1.7	-6.2%	9.2	
ESP PS VL2440	n/a	259	n/a	n/a	n/a	n/a	n/a	n/a	n/a	14.2	0.1	0.9%	9.3	65.8%	1.9	13.5%	0.5	3.4%	26.0	
FRA DFN VL0006	74	48	1.9	100%	0.14	97%	0.4	95.8%	2.2	0.0	0.0%	1.6	75.3%	0.5	21.8%	0.5	21.8%	24.4		
FRA DFN VL0612	407	357	17.8	100%	0.87	99%	4.6	99.9%	29.7	0.0	0.0%	23.6	79.5%	13.1	44.2%	13.1	44.2%	29.4		
FRA DFN VL1218	13	16	0.3	1%	0.03	0%	0.1	0.4%	0.8	0.0	0.0%	0.6	70.2%	0.1	12.5%	0.1	12.5%	30.0		
FRA DRB VL0006	3	0	0.1	100%	0.00	100%	0.0	100.0%	0.0	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
FRA DRB VL0612	9	5	0.2	100%	0.02	100%	0.1	100.0%	0.4	0.0	0.0%	0.3	65.1%	0.1	21.7%	0.1	21.7%	40.5		
FRA DTS VL1218	1	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
FRA DTS VL1824	33	129	6.0	12%	1.66	3%	6.4	4.9%	14.0	0.0	0.1%	6.0	43.1%	1.3	9.4%	1.3	9.4%	36.6		
FRA DTS VL2440	41	164	7.4	32%	4.29	13%	14.9	18.4%	21.1	0.1	0.6%	6.5	30.8%	0.9	4.4%	0.9	4.4%	34.1		
FRA FPO VL0006	74	48	2.2	96%	0.17	96%	0.7	69.6%	1.7	0.0	0.0%	1.3	78.3%	0.3	20.9%	0.3	20.9%	19.8		
FRA FPO VL0612	33	17	0.9	97%	0.12	94%	0.6	98.2%	0.9	0.0	0.0%	0.7	74.8%	0.2	23.8%	0.2	23.8%	27.2		
FRA HOK VL0006	8	n/a	0.1	97%	0.00	96%	0.0	100.0%	0.0	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
FRA HOK VL0612	46	n/a	2.1	100%	0.09	100%	0.4	99.9%	0.0	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
FRA HOK VL1218	4	32	0.1	10%	0.01	1%	0.1	1.1%	2.2	0.0	0.0%	1.3	59.1%	0.2	8.0%	0.2	8.0%	35.9		
FRA MGO VL0006	1	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
FRA MGO VL0612	13	16	0.4	100%	0.04	100%	0.1	100.0%	0.9	0.0	0.0%	0.7	83.0%	0.2	20.3%	0.2	20.3%	33.9		
FRA MGP VL0612	2	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
FRA MGP VL2440	9	42	1.9	70%	2.31	49%	4.7	57.6%	5.6	0.1	1.3%	1.7	29.8%	-0.2	-3.0%	-0.2	-3.0%	43.6		
FRA PGO VL0006	68	40	0.9	98%	0.10	97%	0.3	99.9%	2.2	0.0	0.0%	1.8	82.2%	0.6	27.9%	0.6	27.9%	30.4		
FRA PGO VL0612	74	52	1.3	100%	0.07	90%	0.1	95.8%	2.3	0.0	0.0%	1.9	82.0%	0.5	23.8%	0.5	23.8%	25.6		
FRA PGP VL0006	58	36	1.8	98%	0.10	98%	0.3	99.5%	1.4	0.0	0.0%	1.1	74.9%	0.3	23.7%	0.3	23.7%	20.3		
FRA PGP VL0612	75	n/a	3.3	97%	0.31	97%	1.4	98.7%	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
FRA PGP VL1218	2	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
FRA PMP VL0006	9	n/a	0.3	100%	0.03	100%	0.1	100.0%	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
FRA PMP VL0612	10	13	0.4	100%	0.07	99%	0.2	99.8%	1.3	0.0	0.0%	0.8	66.2%	0.3	23.7%	0.3	23.7%	41.8		
FRA PS VL0612	16	33	0.7	100%	0.36	100%	1.0	99.9%	1.7	0.0	0.0%	1.2	70.3%	0.1	8.7%	0.1	8.7%	32.3		

(Source: EU Member States DCF data submissions)

Table 4.2.3 EU Med. &amp; Black Sea economic performance fleet by fleet segment in 2010 contd 2.

Fleet segment	Number of vessels in Med. & Black Sea	Employment (FTE) in Area 37	Med. & Black Sea days at sea (1000)	Med. & Black Sea days at sea as % of total days in all areas	Med. & Black Sea volume landed (1000 tons)	Med. & Black Sea volume landed as % of total volume landed in all areas	Med. & Black Sea Value landed (€ million)	Med. & Black Sea as % of total value landed in all areas	Total income (€ million) in Area 37	Direct subsidies (€ million) in Area 37	Direct subsidies as % of total income in Area 37	Gross value added (GVA) (€ million) in Area 37	Gross value added (GVA) as % of total income in Area 37	Gross profit (€ million) in Area 37	Gross profit as % of total income in Area 37	Net profit (excluding subsidies) (€ million) in Area 37	Net profit (excluding subsidies) as % of total income in Area 37	Crew wage per FTE (€ 1000) in Area 37
FRA PS VL1218	6	n/a	0.1	3%	0.10	0%	0.2	1.5%	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
FRA PS VL1824	5	27	0.2	39%	0.44	21%	0.6	32.9%	0.9	0.0	0.0%	0.5	58.6%	-0.2	-22.8%	-0.2	-22.8%	28.3
FRA PS VL2440	10	n/a	n/a	100%	0.73	100%	7.0	100.0%	5.2	0.0	0.1%	3.9	74.9%	2.2	42.8%	2.2	42.8%	n/a
FRA PS VL40XX	8	23	n/a	0%	0.98	1%	9.4	9.0%	7.9	0.0	0.0%	4.4	55.7%	0.3	3.4%	0.3	3.4%	178.7
FRA TM VL1824	1	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
FRA TM VL2440	5	29	0.6	51%	1.48	49%	2.1	55.5%	3.5	0.0	0.0%	1.3	35.6%	0.2	5.1%	0.2	5.1%	37.1
ITA DRB VL1218	699	400	62.6	100%	21.79	100%	63.0	100.0%	63.1	0.1	0.2%	47.5	75.3%	26.5	42.0%	13.4	21.3%	52.5
ITA DTS VL0612	172	248	21.0	100%	2.21	100%	13.7	100.0%	14.3	0.6	4.4%	7.6	52.8%	3.6	24.8%	2.1	14.6%	8.8
ITA DTS VL1218	1401	3363	204.7	100%	31.63	100%	216.4	100.0%	225.1	8.7	3.9%	125.2	55.6%	61.9	27.5%	37.4	16.6%	18.8
ITA DTS VL1824	740	2648	114.9	100%	28.73	100%	195.6	100.0%	202.4	6.8	3.3%	97.8	48.3%	49.9	24.7%	6.7	3.3%	18.1
ITA DTS VL2440	275	1692	45.6	100%	12.83	100%	112.7	100.0%	115.8	3.2	2.7%	47.0	40.6%	20.9	18.0%	-17.3	-14.9%	15.4
ITA HOK VL1218	126	415	14.7	100%	2.79	100%	24.9	100.0%	25.0	0.1	0.4%	16.6	66.2%	7.3	29.1%	4.1	16.4%	22.4
ITA HOK VL1824	50	281	8.5	100%	2.35	100%	18.8	100.0%	18.8	0.0	0.2%	10.2	54.3%	4.9	26.1%	0.5	2.8%	18.9
ITA PGP VL0006	2836	2575	304.6	100%	6.99	100%	59.1	100.0%	59.1	0.0	0.0%	43.2	73.1%	23.1	39.1%	17.4	29.4%	2.2
ITA PGP VL0612	5940	7369	761.4	100%	26.45	100%	215.6	100.0%	216.0	0.4	0.2%	142.6	66.0%	76.1	35.2%	35.1	16.3%	4.1
ITA PGP VL1218	489	1255	65.8	100%	7.74	100%	60.1	100.0%	60.2	0.1	0.1%	37.0	61.5%	21.8	36.3%	11.6	19.3%	12.1
ITA PMP VL0612	37	60	4.1	100%	0.23	100%	1.8	100.0%	1.8	0.0	0.0%	1.0	55.9%	0.8	43.1%	0.6	31.9%	2.8
ITA PMP VL1218	53	113	5.5	100%	0.58	100%	4.8	100.0%	4.9	0.1	1.1%	2.6	53.1%	1.4	28.5%	1.0	20.7%	10.6
ITA PS VL1218	126	288	12.2	100%	7.04	100%	17.6	100.0%	17.6	0.0	0.2%	10.8	61.4%	4.6	26.2%	2.2	12.6%	21.6
ITA PS VL1824	47	124	3.3	100%	8.77	100%	13.3	100.0%	13.4	0.1	0.7%	9.5	70.7%	3.7	27.7%	1.2	8.8%	46.3
ITA PS VL2440	59	305	5.1	100%	13.45	100%	17.0	100.0%	17.1	0.1	0.4%	10.4	60.5%	4.9	28.6%	-2.5	-14.5%	17.9
ITA TBB VL1218	12	36	1.4	100%	0.42	100%	1.6	100.0%	1.7	0.1	3.4%	0.8	46.7%	0.3	19.1%	0.1	4.4%	12.9
ITA TBB VL1824	26	104	3.8	100%	0.82	100%	5.4	100.0%	5.6	0.2	3.4%	2.0	35.2%	0.4	7.5%	-0.9	-15.7%	15.1
ITA TBB VL2440	34	180	5.1	100%	2.47	100%	12.4	100.0%	12.8	0.3	2.6%	6.7	52.3%	3.5	27.6%	0.1	0.7%	17.5
ITA TM VL1218	37	80	5.8	100%	10.75	100%	8.6	100.0%	8.8	0.2	2.2%	5.4	61.2%	2.2	25.1%	1.8	20.4%	39.8
ITA TM VL1824	36	130	6.1	100%	11.78	100%	11.5	100.0%	11.9	0.4	3.4%	6.5	54.4%	3.2	26.9%	1.2	9.8%	25.2
ITA TM VL2440	74	338	11.7	100%	23.18	100%	28.9	100.0%	29.6	0.8	2.6%	13.4	45.2%	5.9	20.1%	-0.6	-2.0%	22.0
MLT DFN VL0006	16	n/a	0.0	100%	0.00	100%	0.0	100.0%	0.0	0.0	0.0%	0.0	57.7%	0.0	-145.9%	-0.1	-181.8%	n/a
MLT DFN VL0612	2	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
MLT DFN VL1218	1	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a

(Source: EU Member States DCF data submissions)

Table 4.2.3 EU Med. &amp; Black Sea economic performance fleet by fleet segment in 2010 contd. 3.

Fleet segment	Number of vessels in Med. & Black Sea	Employment (FTE) in Area 37	Med. & Black Sea days at sea (1000)	Med. & Black Sea days as % of total days in all areas	Med. & Black Sea volume landed		Med. & Black Sea Value landed (€ million)	Med. & Black Sea % of total value landed in all areas	Total income (€ million) in Area 37	Direct subsidies (€ million) in Area 37	Direct subsidies as % of total income in Area 37	Gross value added (GVA) (€ million) in Area 37	Gross value added (GVA) as % of total income in Area 37	Gross profit (€ million) in Area 37	Gross profit as % of total income in Area 37	Net profit (excluding subsidies) (€ million) in Area 37	Net profit (excluding subsidies) as % of total income in Area 37	Crew wage per FTE (€ 1000) in Area 37
					Med. & Black Sea volume landed (1000 tons)	Med. & Black Sea volume landed as % of total volume landed in all areas												
MLT DTS VL1824	15	31	0.9	100%	0.16	100%	0.6	100.0%	1.9	0.0	0.0%	0.0	0.7%	-0.8	-43.7%	-2.6	-134.3%	13.1
MLT DTS VL2440	7	10	0.1	100%	0.02	100%	0.2	100.0%	0.2	0.0	0.0%	0.1	20.2%	-0.2	-65.9%	-1.9	-764.3%	20.7
MLT FPO VL0006	8	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
MLT FPO VL0612	4	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
MLT HOK VL0006	44	0	0.3	100%	0.01	100%	0.1	100.0%	0.0	0.0	0.0%	0.0	-83.3%	-0.2	-442.8%	-0.2	-539.8%	
MLT HOK VL0612	64	21	1.0	100%	0.13	100%	0.7	100.0%	0.8	0.0	0.0%	0.3	32.5%	-0.6	-65.3%	-0.9	-105.7%	4.2
MLT HOK VL1218	22	40	0.9	100%	0.22	100%	1.2	100.0%	1.5	0.6	38.5%	0.3	17.6%	-0.5	-32.5%	-0.9	-58.2%	5.2
MLT HOK VL1824	15	56	0.9	100%	0.25	100%	1.5	100.0%	1.2	0.0	0.0%	0.0	3.6%	-0.4	-35.2%	-1.2	-101.0%	6.0
MLT HOK VL2440	4	8	0.0	100%	0.00	100%	0.0	100.0%	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
MLT MGO VL0006	1	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
MLT MGO VL0612	12	10	0.2	100%	0.08	100%	0.2	100.0%	0.2	0.0	0.0%	0.0	14.1%	-0.2	-91.7%	-0.3	-130.2%	7.7
MLT MGO VL1218	9	n/a	0.3	100%	0.21	100%	0.6	100.0%	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
MLT MGO VL1824	1	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
MLT PGP VL0006	391	4	32.1	100%	0.16	100%	0.9	100.0%	0.9	0.0	0.0%	0.1	15.0%	-1.8	-204.4%	-2.2	-245.4%	1.5
MLT PGP VL0612	211	9	17.9	100%	0.18	100%	1.1	100.0%	1.1	0.0	0.1%	0.2	21.5%	-1.2	-111.0%	-1.8	-166.9%	2.6
MLT PMP VL0006	20	n/a	0.8	100%	0.01	100%	0.0	100.0%	0.0	0.0	0.0%	0.0	12.8%	0.0	-185.4%	-0.1	-251.4%	
MLT PMP VL0612	141	40	9.6	100%	0.26	100%	1.2	100.0%	1.0	0.0	0.0%	0.2	20.4%	-1.4	-135.6%	-1.9	-188.2%	3.2
MLT PMP VL1218	8	7	n/a	n/a	n/a	n/a	n/a	n/a	0.2	0.0	0.0%	0.1	44.8%	-0.1	-39.7%	-0.2	-85.3%	17.0
MLT PS VL1218	2	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
ROU PG VL0006	35	49	0.9	100%	0.02	100%	0.0	100.0%	0.0	0.0	0.0%	0.0	49.3%	0.0	8.3%	0.0	5.2%	0.3
ROU PG VL0612	163	335	5.7	100%	0.20	100%	0.4	100.0%	0.4	0.0	0.0%	0.2	46.6%	0.0	3.5%	0.0	0.2%	0.5
ROU PMP VL0006	1	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
ROU PMP VL0612	6	12	0.0	100%	0.01	100%	0.0	100.0%	0.0	0.0	0.0%	0.0	97.7%	0.0	94.7%	0.0	94.6%	0.1
ROU TM VL2440	1	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
SVN DFN VL0006	26	17	1.9	100%	0.01	100%	0.1	100.0%	0.1	0.0	0.0%	0.0	14.4%	-0.1	-112.5%	-0.1	-121.8%	7.2
SVN DFN VL0612	29	34	2.7	100%	0.03	100%	0.3	100.0%	0.3	0.0	0.0%	0.0	14.8%	-0.1	-46.8%	-0.2	-61.3%	4.2
SVN DFN VL1218	2	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
SVN DTS VL0612	7	4	0.3	100%	0.03	100%	0.1	100.0%	0.1	0.0	0.0%	0.0	29.1%	0.0	-25.0%	0.0	-33.4%	12.9
SVN DTS VL1218	11	13	1.2	100%	0.10	100%	0.5	100.0%	0.5	0.0	0.0%	0.1	12.6%	-0.2	-35.6%	-0.2	-48.6%	13.7
SVN FPO VL0006	3	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
SVN FPO VL0612	1	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
SVN FPO VL1218	1	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
SVN HOK VL0006	1	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
SVN HOK VL0612	1	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
SVN PMP VL0612	3	2	0.2	100%	0.01	100%	0.1	100.0%	0.4	0.0	0.0%	0.4	82.6%	0.2	52.7%	0.2	43.8%	51.8
SVN PS VL1218	4	6	0.5	100%	0.16	100%	0.5	100.0%	0.5	0.0	0.0%	0.4	84.9%	0.2	36.7%	0.1	25.7%	36.1
SVN TM VL2440	2	1.08	0.3	100%	0.42	100%	0.5	100.0%	0.5	0.0	0.0%	-0.3	-56.1%	-0.5	-109.5%	-0.6	-114.4%	238.2

(Source: EU Member States DCF data submissions)

## 4.3 North Atlantic

### 4.3.1 EU North Atlantic fleet general overview

The North Atlantic covers ICES subdivisions V, VI, VII (except VIId) and VIII, IX, X, XII, as well as NAFO areas. Fisheries in the North Atlantic are undertaken by vessels from 11 different EU countries, namely: Belgium, Denmark, France, Germany, Ireland, Lithuania, Poland, Portugal, Spain, The Netherlands and United Kingdom. For this analysis data on effort, landings volume and value data by species were not available for Spain. Therefore, the following analyses exclude Spanish data.

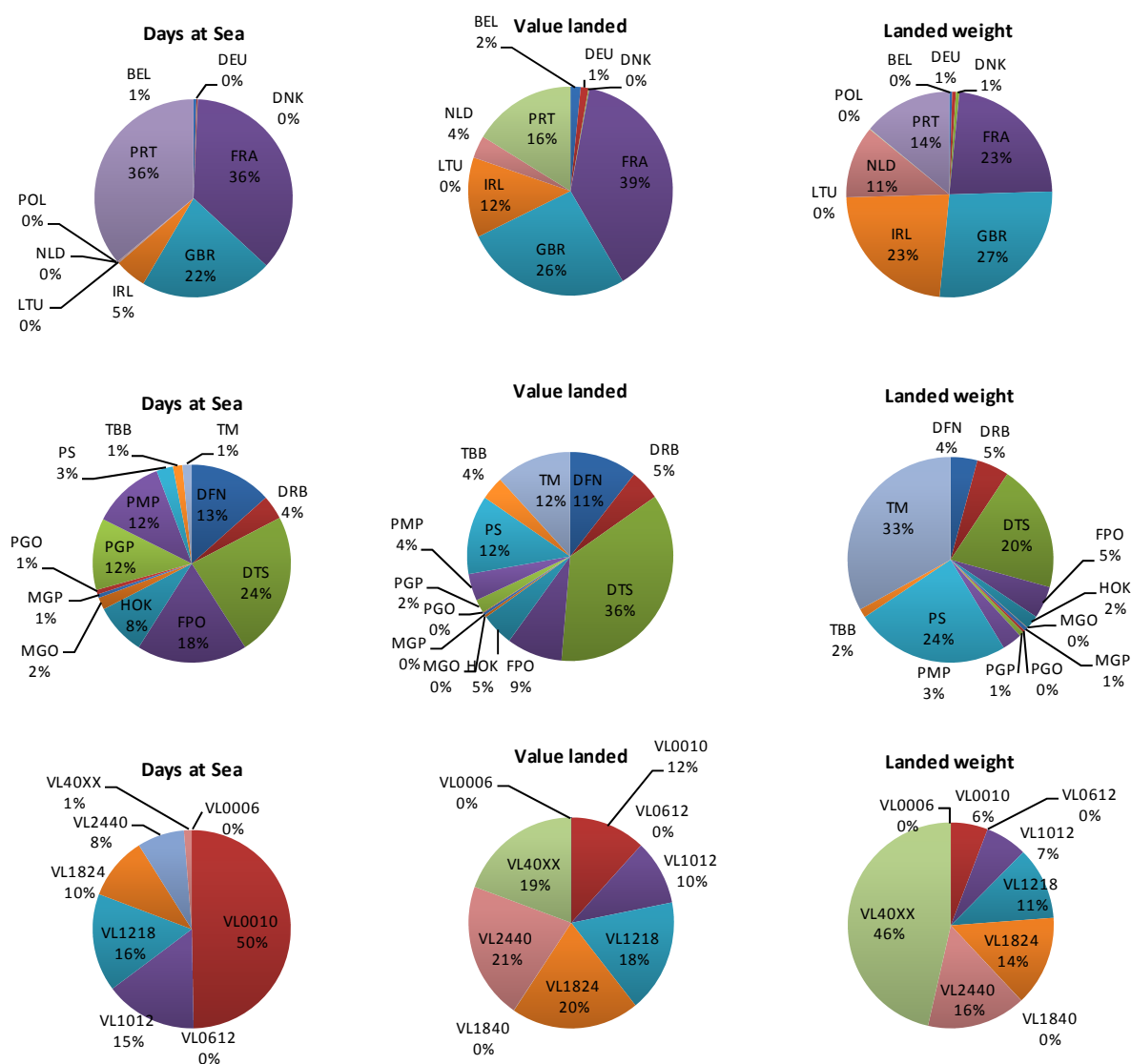


Figure 4.3.1 EU North Atlantic fleet effort and landings in 2010

(Source: EU Member States DCF data submissions)

More than 10 million days at sea (DAS) were recorded by the EU fleets fishing in the North Atlantic in 2010, with France (36%), Portugal (36%), UK (22%) and Ireland (5%) being the major contributors (fig.

4.3.1 left). The remaining Member States account in total for 1%. However, the DAS figures for Ireland are only for the over 10m fleet and as such are an underestimation of total days at sea.

The data suggests that almost 1,094 million tonnes of seafood were landed by the EU fleet operating in the North Atlantic in 2010, with pelagic trawl (33%), purse seine (24%), demersal trawl (20%), dredges (5%) and fixed pots and traps (5%) being the major contributors (fig. 4.3.1 centre). The remaining fleets accounted for 13%.

Excluding data on the Spanish fleet, the remaining EU fleet operating in the North Atlantic generated landings valued at more than €1,480 million in 2010. The French fleet generated the highest share of landed value (39%), followed by the UK fleet (26%), the Portuguese fleet (16%) and then the Irish fleet (12%). The fleets from the remaining Member States accounted for around 7%.

In terms of volume landed, the main species in the North Atlantic is Atlantic mackerel (188 thousand tons in 2010) after the decline (64%) in landed weight of blue whiting in recent years from 160 thousand tonnes to 57 thousand tonnes from 2008 to 2010. Horse mackerel and sardines have maintained a relatively stable trend in the years analysed.

The 1,094 million tonnes of seafood landed by the EU fleet operating in the North Atlantic in 2010, were principally Atlantic mackerel (17%), Jack and horse mackerels (10%), European pilchard (7.5%), Boarfishes (7%) and Blue whiting (5%) (fig. 4.3.1 centre).

In terms of value, €1,480 million of seafood were landed by the EU fleet operating in the North Atlantic in 2010, with Atlantic mackerel (€165 million), Norway lobster (€135 million), common sole (€81 million), monkfish (€67 million) and Great Atlantic scallop (€63 million) being the major contributors.

The increasing trend in boarfish landings between 2008 and 2010 means that it has become one of the most important species in the North Atlantic and has demonstrated an increase in landed weight since 2008. In terms of landed value, mackerel was the most important species in 2010 (€165 million), having overtaken Norway lobster in 2008.

#### **4.3.2 EU North Atlantic fleet economic performance**

Tables 4.3.1, 4.3.2 and 4.3.3 present economic performance data for EU fleets operating in the North Atlantic at Member State and gear type level. Data on the Spanish fleet has been excluded as it was not available at the time of the analysis.

The main segment in terms of volume is the Irish pelagic trawlers over 40m fleet followed by the UK purse seine/pelagic trawl over 40m fleet. The Irish over 40m pelagic trawl segment catches significant volumes and in 2010 generated around €59.5 million in landings and landed the highest volume for all MS and all gears with 170 thousand tonnes. This fleet was also profitable in 2010 with GVA and profits as percentage of income of 59% and 1%, respectively. The Dutch over 40m pelagic trawl vessels are less profitable with a total landed value of €49.5 million, with GVA and profits as a percentage of income of 30.4% and -2%, respectively. The UK pelagic sector is reported under the gear code PS (Purse Seiners). This segment produced €114 million fleet income and yielded profits, with GVA and profits as a percentage of income of 52% and 14%, respectively.

The purse seine fleet is notably important in Portugal. Landings from both the 18-24 and 24-40m purse seiners come entirely from the North Atlantic. These two length categories land a total of 43 and 22 thousand tonnes respectively with a corresponding landed value of €22 and €13 million. These segments are also important in terms of employment representing FTE figures of 976 and 405. These segments



have GVA profits as a percentage of income of 17% and 25%, respectively, and net profits as a percentage of total income of 13% and 21%.

The demersal trawl and seine vessels operating in the North Atlantic region, are all important for the French, UK, Portuguese and Irish fleet, especially the 18-24m and 24-40m length classes. The demersal 24-40m segments are particularly significant for the French, UK and Portuguese fleets with landings values of around €54, €43 and €38 million respectively. While data for profitability can only be derived for the FAO Supra level 27 and not for the North Atlantic on its own, figures for GVA as a percentage of total income are 34%, 69% and 46%, respectively for these MS while only the UK generated a positive value for net profit as a percentage of total income, with a value of 57%.

Table 4.3.1 EU North Atlantic fleet economic performance by MS in 2010

Member State	Number of vessels in Area 27	Employment (FTE) in Area 27	N Atlantic days at sea (1000)	N Atlantic days at sea as % of total days in Area 27	N Atlantic volume landed (1000 tons)	N Atlantic volume landed as % of total volume landed in Area 27	N Atlantic Value landed (€ million)	N Atlantic value as % of total value landed in Area 27	Total income (€ million) in Area 27	Direct subsidies (€ million) in Area 27	Direct subsidies as % of total income in Area 27	Gross value added (GVA) (€ million) in Area 27	Gross value added (GVA) as % of total income in Area 27	Gross profit (€ million) in Area 27	Gross profit as % of total income in Area 27	Net profit (excluding subsidies) (€ million) in Area 27	Net profit (excluding subsidies) as % of total income in Area 27	Crew wage per FTE (€ 1000) in Area 27
Belgium	84	350	4.6	25.7%	4.9	25.0%	23.9	31.4%	81.4	1.5	1.8%	35.1	43.2%	9.2	11.3%	-0.2	-0.3%	67.7
Germany	1268	1276	1.8	1.6%	8.4	9.1%	22.6	16.0%	145.7	1.3	0.9%	76.2	52.3%	32.7	22.4%	18.9	13.0%	26.7
Denmark	1639	1807	0.5	0.4%	6.1	0.8%	2.3	0.6%	404.7	0.1	0.0%	267.0	66.0%	147.4	36.4%	58.8	14.5%	43.7
Spain	n/a	15817	n/a	n/a	n/a	n/a	n/a	n/a	738.7	11.3	1.5%	394.0	53.3%	76.8	10.4%	29.3	4.0%	15.4
France	3000	6718	366.2	82.4%	250.9	73.0%	570.0	75.2%	839.8	5.7	0.7%	419.7	50.0%	104.7	12.5%	31.1	3.7%	46.9
UK	4675	6918	218.7	52.3%	298.4	51.9%	397.7	48.6%	943.8	37.7	4.0%	418.7	44.4%	200.2	21.2%	122.2	12.9%	29.3
Ireland	2109	3119	52.4	98.7%	252.1	91.2%	182.9	91.4%	308.5	1.0	0.3%	179.1	58.0%	78.5	25.4%	-18.0	-5.8%	31.3
Lithuania	99	212	0.8	9.6%	0.2	1.5%	0.4	5.6%	7.3	0.1	1.4%	2.1	28.8%	0.9	12.9%	0.4	5.0%	5.3
Netherlands	580	2205	1.7	3.4%	124.3	44.1%	51.6	16.2%	358.5	0.0	0.0%	136.6	38.1%	43.7	12.2%	-2.2	-0.6%	38.0
Poland	721	1268	0.1	0.2%	1.0	0.8%	0.0	0.0%	55.0	14.8	27.0%	21.8	39.6%	10.4	18.9%	6.2	11.2%	9.0
Portugal	4832	16045	364.9	99.9%	166.9	97.1%	273.9	91.3%	345.5	1.8	0.5%	216.4	62.6%	82.7	23.9%	20.7	6.0%	8.0
Sweden	1055	990	n/a	n/a	n/a	n/a	n/a	n/a	142.3	0.0	0.0%	72.7	51.1%	44.7	31.4%	3.0	2.1%	13.8

Notes: excludes inactive vessels

(Source: EU Member States DCF data submissions)

Table 4.3.2 EU North Atlantic fleet economic performance by gear type in 2010

Member State	Number of vessels in Area 27	Employment (FTE) in Area 27	N Atlantic days at sea (1000)	N Atlantic days at sea as % of total days in Area 27	N Atlantic volume landed (1000 tons)	N Atlantic volume landed as % of total volume landed in Area 27	N Atlantic Value landed (€ million)	N Atlantic value as % of total value landed in Area 27	Total income (€ million) in Area 27	Direct subsidies (€ million) in Area 27	Direct subsidies as % of total income in Area 27	Gross value added (GVA) (€ million) in Area 27	Gross value added (GVA) as % of total income in Area 27	Gross profit (€ million) in Area 27	Gross profit as % of total income in Area 27	Net profit (excluding subsidies) (€ million) in Area 27	Net profit (excluding subsidies) as % of total income in Area 27	Crew wage per FTE (€ 1000) in Area 27
DFN	2637	5811	135.6	71.3%	46.2	72.4%	157.4	73.8%	286.7	4.1	1.4%	168.4	58.7%	43.6	15.2%	12.7	4.4%	20.4
DRB	1109	2195	39.8	55.8%	55.7	47.5%	69.5	48.0%	210.2	2.9	1.4%	109.2	52.0%	36.4	17.3%	-11.0	-5.2%	31.8
DTS	2792	14276	238.9	56.6%	235.0	19.1%	571.8	42.9%	1804.5	33.5	1.9%	858.5	47.6%	372.5	20.6%	157.3	8.7%	31.7
FPO	3655	4447	182.6	67.3%	55.3	72.8%	128.9	73.4%	263.5	4.2	1.6%	160.2	60.8%	77.2	29.3%	44.9	17.0%	16.3
HOK	1250	3300	85.1	87.5%	23.5	86.4%	75.6	87.9%	152.0	4.3	2.8%	83.2	54.8%	11.4	7.5%	0.0	0.0%	18.3
MGO	162	109	20.1	99.5%	0.7	98.3%	5.4	99.5%	11.7	0.0	0.1%	7.4	63.0%	2.5	21.3%	1.0	8.9%	44.9
MGP	144	306	5.8	29.9%	6.1	16.2%	5.8	16.2%	38.5	0.1	0.4%	20.4	53.1%	6.3	16.3%	2.7	7.1%	46.2
PG	4841	2719	0.0	0.0%	0.0	0.0%	0.0	0.0%	66.6	8.3	12.4%	26.2	39.3%	1.0	1.6%	-12.9	-19.4%	3.1
PGO	119	110	7.5	99.3%	4.0	100.0%	1.4	99.9%	8.9	0.0	0.0%	7.1	79.8%	2.3	26.3%	1.5	17.3%	43.3
PGP	3571	5185	118.3	57.7%	7.9	27.5%	31.4	40.9%	135.5	1.0	0.7%	79.8	58.9%	19.8	14.6%	1.6	1.2%	8.8
PMP	1627	9818	119.8	87.9%	34.2	69.0%	61.7	73.3%	244.3	0.5	0.2%	155.4	63.6%	21.0	8.6%	-8.1	-3.3%	7.4
PS	290	5842	27.5	94.9%	268.6	70.8%	186.4	70.5%	412.1	8.1	2.0%	245.5	59.6%	102.4	24.8%	66.3	16.1%	23.8
TBB	739	2337	15.6	15.0%	15.1	11.5%	54.0	14.2%	396.4	5.9	1.5%	169.4	42.7%	65.5	16.5%	28.5	7.2%	37.8
TM	449	2209	15.3	32.3%	360.9	37.5%	176.0	50.6%	408.9	5.8	1.4%	179.7	44.0%	83.5	20.4%	-14.3	-3.5%	42.7

Table 4.3.3 EU North Atlantic fleet economic performance by MS in 2010

Fleet segment	Number of vessels in Area 27	Employment (FTE) in Area 27	N Atlantic days at sea (1000)	N Atlantic days at sea as % of total days in Area 27	N Atlantic volume landed (1000 tons)	N Atlantic volume landed as % of total volume landed in Area 27	N Atlantic Value landed (€ million)	N Atlantic value as % of total value landed in Area 27	Total income (€ million) in Area 27	Direct subsidies (€ million) in Area 27	Direct subsidies as % of total income in Area 27	Gross value added (GVA) (€ million) in Area 27	Gross value added (GVA) as % of total income in Area 27	Gross profit (€ million) in Area 27	% of total income in Area 27	Gross profit as (excluding subsidies) (€ million) in Area 27	Net profit (excluding subsidies) as % of total income in Area 27	Crew wage per FTE (€ 1000) in Area 27
FRA DFN VL2440	23	286	5.0	100.0%	9.4	100.0%	19.8	100.0%	29.7	1.1	3.8%	17.5	58.9%	6.1	20.5%	3.3	11.0%	40.0
FRA MGO VL1012	11	109	3.8	100.0%	0.0	100.0%	0.3	100.0%	11.7	0.0	0.1%	7.4	63.0%	2.5	21.3%	1.0	8.9%	44.9
FRA PMP VL2440	1	39	0.2	100.0%	0.2	100.0%	0.6	100.0%	3.6	0.1	2.3%	2.0	55.2%	0.5	13.6%	0.1	3.2%	38.2
FRA PS VL1824	2	129	0.3	100.0%	1.4	100.0%	1.1	100.0%	15.2	0.7	4.7%	9.9	65.6%	2.5	16.5%	1.2	7.9%	57.9
IRL DFN VL1218	8	430	1.2	100.0%	0.4	100.0%	0.8	100.0%	20.4	0.1	0.5%	10.5	51.4%	-6.2	-30.2%	-10.1	-49.3%	37.1
IRL DRB VL1012	53	762	1.0	100.0%	0.4	100.0%	1.2	100.0%	51.3	0.0	0.1%	36.5	71.2%	9.3	18.1%	-22.8	-44.6%	34.5
IRL DTS VL1218	57	205	6.9	100.0%	3.8	100.0%	8.4	100.0%	11.2	0.1	0.7%	4.7	42.1%	2.8	25.0%	0.4	3.3%	7.9
IRL DTS VL1824	64	377	13.5	99.8%	18.4	100.0%	42.0	100.0%	32.9	0.2	0.7%	12.7	38.8%	-0.6	-1.9%	-5.5	-16.7%	34.8
IRL DTS VL2440	29	232	8.0	100.0%	14.7	100.0%	23.8	100.0%	21.0	0.2	0.8%	5.9	28.2%	0.9	4.3%	-2.5	-12.1%	21.2
IRL FPO VL1218	19	45	1.6	100.0%	1.1	100.0%	1.4	100.0%	2.2	0.0	1.0%	1.0	44.1%	-0.8	-35.6%	-1.7	-78.9%	37.2
IRL TBB VL2440	6	59	1.4	100.0%	1.3	100.0%	3.5	100.0%	4.7	0.0	0.5%	1.1	23.5%	0.1	2.6%	-1.3	-28.1%	16.0
PRT DFN VL0010	551	1270	17.2	100.0%	0.7	100.0%	2.8	100.0%	7.7	0.0	0.0%	5.3	68.3%	2.0	25.7%	0.6	8.3%	2.1
PRT DFN VL1012	23	95	2.9	100.0%	0.4	100.0%	1.7	100.0%	1.8	0.0	0.7%	1.3	72.5%	0.7	36.5%	0.3	14.5%	5.9
PRT DFN VL1218	85	661	13.8	100.0%	3.4	100.0%	11.6	100.0%	12.9	0.1	0.8%	9.0	69.9%	3.2	25.0%	1.1	8.3%	8.2
PRT DFN VL1824	24	286	4.5	100.0%	1.5	100.0%	4.7	100.0%	7.0	0.1	1.3%	4.4	63.1%	1.8	25.8%	0.1	2.0%	8.9
PRT DRB VL0010	33	81	2.9	100.0%	0.2	100.0%	0.5	100.0%	0.6	0.0	0.6%	0.3	47.9%	0.0	-3.8%	-0.2	-38.3%	3.7
PRT DRB VL1012	25	93	2.2	100.0%	0.4	100.0%	0.7	100.0%	0.8	0.0	1.1%	0.4	49.3%	-0.2	-21.6%	-0.5	-64.7%	6.0
PRT DRB VL1218	17	90	1.3	100.0%	0.4	100.0%	0.7	100.0%	1.2	0.0	1.8%	0.7	58.8%	-0.2	-12.9%	-0.6	-46.3%	9.3
PRT DTS VL0010	76	195	7.4	100.0%	0.4	100.0%	1.4	100.0%	2.4	0.0	0.0%	1.4	58.4%	0.2	9.9%	-0.2	-6.8%	5.1
PRT DTS VL1012	6	26	0.6	100.0%	0.0	100.0%	0.2	100.0%	0.3	0.0	1.0%	0.3	78.5%	0.2	46.7%	0.1	22.0%	3.4
PRT DTS VL1218	9	55	1.6	100.0%	0.7	100.0%	2.1	100.0%	2.2	0.0	0.4%	1.2	53.8%	0.2	8.8%	0.0	-1.8%	17.4
PRT DTS VL1824	8	71	1.9	100.0%	0.9	100.0%	4.8	100.0%	5.4	0.1	1.1%	3.2	59.6%	1.4	25.2%	0.4	7.9%	25.9
PRT DTS VL2440	59	522	12.5	100.0%	16.4	100.0%	38.3	100.0%	41.5	0.4	1.0%	19.0	45.8%	7.0	17.0%	-0.3	-0.8%	22.9
PRT FPO VL0010	328	675	24.4	100.0%	1.6	100.0%	6.3	100.0%	7.9	0.0	0.2%	5.5	69.2%	1.2	14.6%	-0.2	-2.8%	5.5
PRT FPO VL1012	50	190	6.1	100.0%	1.0	100.0%	3.5	100.0%	4.2	0.0	0.5%	3.1	73.1%	1.8	42.7%	1.0	22.9%	6.1
PRT FPO VL1218	54	394	7.8	100.0%	2.3	100.0%	8.3	100.0%	9.9	0.1	1.1%	7.1	71.4%	3.2	32.3%	1.7	17.3%	9.4
PRT FPO VL1824	8	103	1.5	100.0%	0.7	100.0%	2.1	100.0%	2.7	0.0	1.8%	2.0	74.1%	1.0	36.9%	0.3	12.9%	9.4
PRT HOK VL0010	239	447	12.7	100.0%	0.5	100.0%	1.9	100.0%	3.3	0.0	0.0%	2.2	65.9%	1.2	36.7%	0.8	23.5%	2.0
PRT HOK VL1012	15	92	1.7	100.0%	0.3	100.0%	1.3	100.0%	1.6	0.0	0.2%	1.1	68.4%	0.1	8.8%	-0.1	-7.8%	10.0
PRT HOK VL1218	21	207	2.8	100.0%	1.7	100.0%	5.5	100.0%	6.9	0.1	0.8%	4.7	67.5%	1.7	24.5%	0.9	13.6%	14.3

(Source: EU Member States DCF data submissions)

Table 4.3.3 EU North Atlantic fleet economic performance by MS in 2010 contd 1.

Fleet segment	Number of vessels in Area 27	Employment (FTE) in Area 27	N Atlantic days at sea (1000)	N Atlantic days at sea as % of total days in Area 27	N Atlantic volume landed (1000 tons)	N Atlantic volume landed as % of total volume landed in Area 27	N Atlantic Value landed (€ million)	N Atlantic value as % of total value landed in Area 27	Total income (€ million) in Area 27	Direct subsidies (€ million) in Area 27	Direct subsidies as % of total income in Area 27	Gross value added (GVA) (€ million) in Area 27	Gross value added (GVA) as % of total income in Area 27	Gross profit (€ million) in Area 27	Gross profit as % of total income in Area 27	Net profit (excluding subsidies) (€ million) in Area 27	Net profit (excluding subsidies) as % of total income in Area 27	Crew wage per FTE (€ 1000) in Area 27
PRT HOK VL1824	25	274	4.1	100.0%	4.0	100.0%	12.7	100.0%	14.6	0.1	0.8%	9.4	64.0%	3.8	25.7%	1.8	12.1%	20.3
PRT HOK VL2440	15	153	3.4	100.0%	3.5	100.0%	9.1	100.0%	11.2	0.2	1.7%	4.7	41.9%	1.6	14.3%	-0.3	-2.5%	20.2
PRT MGP VL0010	12	23	0.3	100.0%	0.0	100.0%	0.0	100.0%	0.1	0.0	0.0%	0.1	65.8%	0.0	23.9%	0.0	11.2%	1.8
PRT PGP VL0010	1629	3483	100.3	100.0%	5.4	100.0%	21.9	100.0%	31.4	0.0	0.1%	22.1	70.6%	13.2	42.0%	7.5	23.9%	2.2
PRT PGP VL1012	23	85	1.9	100.0%	0.2	100.0%	0.8	100.0%	1.2	0.0	0.3%	0.8	66.0%	0.1	11.5%	-0.2	-14.0%	6.9
PRT PGP VL1218	26	153	2.7	100.0%	0.7	100.0%	2.6	100.0%	3.6	0.0	0.9%	2.5	69.5%	1.1	29.5%	0.2	6.3%	8.7
PRT PGP VL1824	4	36	0.1	100.0%	0.0	100.0%	0.1	100.0%	1.0	0.0	0.5%	0.5	50.6%	0.3	29.0%	-0.3	-32.8%	6.0
PRT PMP VL0010	1086	2141	79.9	100.0%	6.6	100.0%	15.7	100.0%	19.0	0.0	0.0%	12.3	64.6%	4.7	24.7%	-5.3	-28.1%	3.4
PRT PMP VL1012	86	564	11.1	100.0%	2.6	100.0%	6.9	100.0%	6.6	0.0	0.0%	4.5	68.7%	-1.4	-21.4%	-2.8	-43.2%	10.3
PRT PMP VL1218	56	458	8.5	100.0%	3.3	100.0%	7.3	100.0%	8.2	0.0	0.1%	5.7	70.0%	0.7	9.0%	-0.6	-6.9%	10.6
PRT PMP VL2440	26	262	2.7	100.0%	9.0	100.0%	14.0	100.0%	15.4	0.0	0.0%	9.5	61.5%	6.1	39.8%	2.1	13.9%	12.8
PRT PS VL0010	54	367	3.6	100.0%	2.5	100.0%	2.3	100.0%	2.6	0.0	0.1%	1.9	74.2%	0.4	16.1%	0.1	2.5%	3.3
PRT PS VL1012	35	296	3.9	100.0%	4.6	100.0%	4.3	100.0%	4.6	0.0	0.5%	3.5	76.3%	1.4	30.1%	0.9	19.0%	6.9
PRT PS VL1218	36	399	4.0	100.0%	9.3	100.0%	6.5	100.0%	6.9	0.1	0.8%	4.9	71.5%	-0.1	-1.4%	-0.5	-6.7%	12.1
PRT PS VL1824	54	976	7.1	100.0%	43.1	100.0%	22.8	100.0%	26.4	0.2	0.9%	18.6	70.6%	4.6	17.3%	3.5	13.2%	14.3
PRT PS VL2440	21	405	2.8	100.0%	22.4	100.0%	13.3	100.0%	16.2	0.1	0.6%	11.7	72.7%	4.0	24.7%	3.5	21.4%	19.1
FRA TM VL1012	7	14	1.0	100.0%	1.3	100.0%	2.1	100.0%	1.8	0.0	0.1%	1.1	61.1%	0.3	18.1%	0.2	8.5%	56.1
IRL FPO VL1012	114	137	7.6	100.0%	4.6	100.0%	6.6	100.0%	12.8	0.0	0.1%	10.3	80.4%	8.4	65.7%	6.4	50.2%	13.6
FRA PGP VL1012	11	25	1.8	100.0%	0.4	99.8%	1.5	99.9%	1.7	0.0	0.1%	1.1	61.2%	0.3	16.8%	0.0	1.6%	30.8
FRA PGP VL1218	3	12	0.7	99.7%	0.3	99.6%	1.0	99.7%	1.1	0.0	0.1%	0.6	53.5%	0.2	14.0%	0.1	6.7%	36.7
FRA PGO VL1012	5	110	0.2	92.0%	3.2	100.0%	0.1	99.3%	8.9	0.0	0.0%	7.1	79.8%	2.3	26.3%	1.5	17.3%	43.3
FRA DFN VL1824	39	223	8.4	95.6%	5.7	96.3%	23.8	97.6%	26.3	0.0	0.0%	14.5	55.0%	3.9	14.9%	1.7	6.5%	47.3
GBR FPO VL1824	10	81	2.5	94.2%	4.9	98.1%	7.8	97.5%	9.7	0.3	3.1%	3.9	40.2%	1.3	13.2%	0.5	4.6%	32.4
FRA FPO VL1824	12	64	2.3	97.9%	2.6	98.1%	5.5	97.2%	5.9	0.0	0.6%	3.1	53.5%	0.4	6.6%	-0.6	-9.5%	43.0
FRA PMP VL1012	72	129	9.7	97.5%	8.1	97.7%	11.3	96.7%	17.6	0.0	0.1%	10.7	60.7%	3.5	19.8%	2.1	11.7%	55.9
FRA DRB VL0010	74	64	5.2	94.7%	4.8	97.7%	4.7	96.6%	6.8	0.0	0.0%	4.5	66.6%	1.4	21.2%	0.6	8.8%	48.0
FRA DTS VL1218	163	501	34.2	95.2%	19.8	92.3%	70.4	95.2%	76.1	0.4	0.5%	38.8	51.0%	10.5	13.8%	3.3	4.4%	56.5
FRA HOK VL1012	47	92	6.9	94.5%	1.7	87.1%	8.0	94.8%	9.4	0.0	0.0%	5.8	61.3%	1.7	18.5%	0.8	8.4%	43.7
FRA FPO VL1012	57	146	9.0	92.8%	5.6	94.8%	11.5	93.6%	16.8	0.0	0.0%	9.7	57.5%	2.2	13.0%	1.0	5.9%	51.2
FRA HOK VL2440	5	0	1.2	95.7%	1.7	93.8%	3.4	93.0%	1.2	0.0	0.0%	0.0	0.0%	0.0	0.0%	1.1	95.1%	#DIV/0!

(Source: EU Member States DCF data submissions)

Table 4.3.3 EU North Atlantic fleet economic performance by MS in 2010 contd 2.

Fleet segment	Number of vessels in Area 27	Employment (FTE) in Area 27	N Atlantic days at sea (1000)	N Atlantic days at sea as % of total days in Area 27	N Atlantic volume landed (1000 tons)	N Atlantic volume landed as % of total volume landed in Area 27	N Atlantic Value landed (€ million)	N Atlantic value as % of total value landed in Area 27	Total income (€ million) in Area 27	Direct subsidies (€ million) in Area 27	Direct subsidies as % of total income in Area 27	Gross value added (GVA) (€ million) in Area 27	Gross value added as % of total income in Area 27	Gross profit (€ million) in Area 27	Gross profit as % of total income in Area 27	Net profit (excluding subsidies) (€ million) in Area 27	Net profit (excluding subsidies) as % of total income in Area 27	Crew wage per FTE (€ 1000) in Area 27
FRA HOK VL1218	4	9	0.5	90.4%	0.7	93.0%	1.2	92.6%	1.5	0.0	0.0%	0.8	55.9%	0.2	12.0%	0.1	3.7%	73.3
FRA PMP VL0010	65	78	6.2	94.0%	3.4	97.5%	4.1	92.3%	7.5	0.0	0.2%	4.7	63.5%	1.3	17.8%	0.7	9.0%	43.6
FRA DTS VL1012	155	259	21.0	90.4%	7.4	89.5%	26.1	91.5%	35.6	0.1	0.3%	19.6	55.1%	6.2	17.4%	2.1	5.9%	51.7
FRA TM VL1218	17	75	3.3	92.6%	4.3	94.7%	9.2	91.5%	9.2	0.0	0.4%	4.8	52.0%	1.4	15.5%	0.7	7.3%	44.8
FRA HOK VL0010	272	262	35.1	90.9%	2.7	91.7%	16.6	90.6%	23.9	0.0	0.1%	14.6	61.0%	4.2	17.4%	3.7	15.5%	39.8
FRA FPO VL0010	273	326	26.1	88.4%	5.7	88.3%	17.6	90.5%	29.2	0.0	0.0%	18.3	62.9%	5.1	17.3%	3.0	10.3%	40.8
GBR DFN VL1218	13	46	1.9	93.7%	1.3	90.3%	4.3	89.4%	4.9	0.1	2.2%	3.2	65.2%	2.0	40.1%	1.8	36.9%	26.6
IRL TM VL2440	14	116	1.0	94.7%	24.9	87.8%	13.5	88.4%	24.4	0.2	0.9%	13.8	56.2%	6.3	25.9%	-2.7	-11.2%	63.1
FRA DFN VL1218	83	294	14.9	85.2%	5.9	85.1%	30.4	84.0%	35.9	0.1	0.2%	20.8	58.0%	5.2	14.5%	2.4	6.7%	53.1
GBR TBB VL1824	15	71	3.0	82.7%	2.9	86.9%	8.8	83.9%	11.6	0.6	5.2%	4.9	42.2%	2.4	20.9%	1.6	13.7%	34.8
FRA DTS VL2440	56	334	13.1	82.2%	22.9	77.1%	54.3	83.0%	54.0	0.4	0.8%	18.3	33.9%	2.6	4.9%	-3.7	-6.8%	46.9
IRL TM VL40XX	20	176	1.9	91.2%	170.4	90.4%	59.5	82.1%	82.1	0.0	0.0%	48.2	58.7%	30.8	37.5%	0.8	1.0%	97.7
FRA FPO VL1218	8	27	1.1	85.6%	0.8	80.3%	1.6	81.6%	2.2	0.1	3.6%	1.1	52.9%	0.2	9.9%	0.0	0.1%	34.5
FRA TM VL1824	28	132	4.9	83.4%	7.9	73.0%	19.0	80.7%	23.0	0.5	2.1%	9.1	39.4%	1.4	6.0%	-1.1	-4.8%	58.2
FRA DFN VL0010	365	355	32.5	85.9%	3.0	75.9%	14.0	80.0%	27.9	0.1	0.3%	16.8	60.3%	3.8	13.8%	1.2	4.2%	36.5
GBR DTS VL1012	92	222	9.1	78.1%	3.7	80.3%	8.0	79.0%	11.9	0.5	4.3%	5.1	42.8%	2.6	22.1%	1.9	16.2%	11.1
FRA DTS VL0010	96	92	12.8	85.4%	0.9	78.7%	4.7	78.6%	9.9	0.0	0.2%	5.8	58.2%	1.7	17.0%	0.5	5.0%	44.6
FRA DTS VL1824	151	803	30.3	80.5%	32.5	63.6%	95.2	76.0%	128.1	1.5	1.2%	48.8	38.1%	13.0	10.1%	0.7	0.5%	44.6
GBR TBB VL2440	27	227	4.8	81.8%	5.5	69.8%	16.5	74.5%	42.7	3.1	7.2%	12.5	29.2%	4.4	10.4%	3.6	8.3%	35.4
GBR HOK VL0010	497	159	13.1	73.8%	1.8	72.9%	4.5	73.5%	6.8	0.1	2.2%	3.0	43.8%	-0.1	-0.8%	-1.4	-20.1%	9.1
GBR DRB VL1218	70	187	6.6	74.9%	7.8	74.2%	12.8	73.0%	20.5	0.7	3.6%	4.9	23.8%	0.5	2.6%	-0.5	-2.4%	23.3
GBR HOK VL2440	13	103	2.2	77.7%	4.0	74.3%	9.5	71.4%	16.2	0.6	3.7%	8.4	52.0%	-0.2	-1.5%	-0.6	-3.9%	84.1
GBR DTS VL1218	250	819	27.9	73.1%	15.2	66.6%	31.9	64.7%	64.3	2.8	4.3%	21.5	33.4%	9.4	14.7%	6.6	10.3%	14.7
GBR PS VL1218	7	41	0.6	59.4%	3.9	95.4%	1.2	63.4%	2.6	0.1	4.1%	-0.2	-9.3%	-0.9	-33.9%	-1.2	-46.7%	15.6
GBR DFN VL1012	16	27	1.0	60.3%	0.7	86.8%	0.9	62.8%	1.7	0.1	3.4%	1.0	59.5%	0.6	34.6%	0.5	27.9%	15.2
NLD TM VL40XX	13	502	1.3	61.3%	123.7	61.3%	49.5	62.4%	115.1	0.0	0.0%	30.4	26.4%	-2.3	-2.0%	-25.6	-22.2%	65.2
FRA DTS VL40XX	11	230	1.9	60.7%	9.1	36.4%	19.4	62.2%	43.6	0.0	0.0%	9.6	21.9%	-3.6	-8.3%	-4.5	-10.3%	57.3
GBR DRB VL1824	24	96	2.8	61.3%	10.6	78.7%	8.9	62.2%	15.8	0.6	3.6%	4.0	25.3%	0.7	4.5%	-0.2	-1.4%	34.1
GBR FPO VL1012	180	414	16.9	59.1%	5.0	59.9%	12.3	62.0%	22.3	0.5	2.4%	13.2	59.2%	8.7	39.0%	7.1	31.8%	10.9
GBR FPO VL1218	72	254	7.7	64.5%	6.9	66.2%	11.2	61.9%	19.4	0.9	4.5%	6.7	34.4%	1.5	7.8%	0.1	0.5%	20.4
DEU DFN VL2440	5	68	1.0	58.9%	0.9	55.2%	4.1	61.4%	6.8	0.0	0.1%	3.9	57.7%	3.5	51.5%	3.1	45.5%	3.0

(Source: EU Member States DCF data submissions)

Table 4.3.3 EU North Atlantic fleet economic performance by MS in 2010 contd 3.

Fleet segment	Number of vessels in Area 27	Employment (FTE) in Area 27	N Atlantic days at sea (1000)	N Atlantic days at sea as % of total days in Area 27	N Atlantic volume landed (1000 tons)	N Atlantic volume landed as % of total volume landed in Area 27	N Atlantic Value landed (€ million)	N Atlantic value as % of total value landed in Area 27	Total income (€ million) in Area 27	Direct subsidies (€ million) in Area 27	Direct subsidies as % of total income in Area 27	Gross value added (GVA) (€ million) in Area 27	Gross value added as % of total income in Area 27	Gross profit (€ million) in Area 27	% of total income in Area 27	Gross profit (excluding subsidies) (€ million) in Area 27	Net profit (excluding subsidies) as % of total income in Area 27	Net profit (excluding subsidies) as % of total income in Area 27	Crew wage per FTE (€ 1000) in Area 27
GBR PS VL40XX	34	186	1.6	71.2%	159.4	59.2%	120.3	61.0%	221.5	6.0	2.7%	115.6	52.2%	64.9	29.3%	35.5	16.0%	272.7	
FRA DFN VL1012	184	512	18.9	62.5%	6.2	65.7%	24.8	58.4%	47.9	0.1	0.1%	30.0	62.5%	8.1	16.9%	3.8	7.9%	42.7	
PRT DTS VL40XX	13	418	2.4	87.0%	16.1	76.1%	35.4	57.5%	56.4	0.0	0.0%	31.7	56.2%	15.8	28.0%	6.0	10.7%	38.0	
GBR TBB VL0010	23	5	0.4	64.9%	0.0	41.2%	0.1	56.6%	0.3	0.0	3.7%	0.2	43.9%	0.1	27.6%	0.0	3.6%	8.8	
GBR DRB VL1012	26	61	1.8	54.6%	1.3	64.1%	2.4	55.9%	5.0	0.2	4.0%	1.5	29.9%	0.6	11.4%	0.4	7.1%	15.3	
GBR FPO VL0010	1756	1012	66.7	49.9%	10.7	53.1%	30.4	55.5%	73.0	2.1	2.9%	40.9	56.0%	15.7	21.5%	5.3	7.3%	15.5	
FRA DRB VL1012	85	164	5.8	61.2%	10.2	84.0%	7.0	55.3%	18.0	0.1	0.4%	10.4	57.6%	2.9	15.9%	0.8	4.2%	45.7	
FRA MGP VL1824	3	126	0.3	54.1%	0.3	17.9%	0.8	54.5%	16.8	0.0	0.0%	8.9	53.1%	2.6	15.4%	0.9	5.3%	50.0	
GBR HOK VL1012	12	31	0.6	51.2%	0.1	60.5%	0.4	52.4%	1.9	0.2	8.5%	0.6	31.2%	-0.4	-19.3%	-0.5	-25.2%	31.0	
GBR DRB VL0010	95	66	2.2	40.4%	1.5	64.2%	2.4	52.0%	5.5	0.2	2.9%	3.0	55.0%	1.3	23.2%	0.6	11.5%	21.0	
GBR DFN VL2440	9	101	1.4	59.5%	1.6	56.8%	5.1	50.2%	11.9	0.2	1.8%	7.9	66.7%	4.9	41.4%	4.6	38.3%	29.8	
ESP DFN VL1218	n/a	161	n/a	n/a	n/a	n/a	n/a	n/a	4.7	0.2	3.5%	3.1	65.1%	0.9	18.5%	0.4	8.7%	10.6	
ESP DFN VL1824	n/a	409	n/a	n/a	n/a	n/a	n/a	n/a	9.1	0.8	8.7%	4.5	49.7%	0.6	6.9%	-0.3	-2.8%	8.8	
ESP DFN VL2440	n/a	60	n/a	n/a	n/a	n/a	n/a	n/a	3.7	0.1	3.6%	1.8	49.5%	-0.6	-16.3%	-0.6	-17.2%	40.2	
ESP DTS VL1218	n/a	329	n/a	n/a	n/a	n/a	n/a	n/a	10.1	0.0	0.2%	4.0	39.7%	0.2	2.4%	-1.8	-17.5%	10.9	
ESP DTS VL1824	n/a	428	n/a	n/a	n/a	n/a	n/a	n/a	23.9	0.4	1.6%	9.2	38.6%	2.5	10.5%	-1.2	-5.1%	11.8	
ESP DTS VL2440	n/a	2454	n/a	n/a	n/a	n/a	n/a	n/a	182.0	4.3	2.4%	73.0	40.1%	12.5	6.9%	-3.0	-1.7%	24.3	
ESP DTS VL40XX	n/a	963	n/a	n/a	n/a	n/a	n/a	n/a	147.2	2.4	1.6%	74.1	50.3%	35.5	24.1%	22.2	15.1%	40.1	
ESP HOK VL0010	n/a	76	n/a	n/a	n/a	n/a	n/a	n/a	2.0	0.1	4.7%	1.4	67.9%	-3.7	-182.9%	-3.7	-182.9%	17.1	
ESP HOK VL1012	n/a	207	n/a	n/a	n/a	n/a	n/a	n/a	4.5	0.0	0.0%	3.0	66.3%	-1.8	-40.9%	-2.4	-52.7%	6.7	
ESP HOK VL1218	n/a	500	n/a	n/a	n/a	n/a	n/a	n/a	10.1	0.0	0.0%	4.7	46.3%	-1.6	-15.9%	-1.6	-15.9%	10.2	
ESP HOK VL1824	n/a	159	n/a	n/a	n/a	n/a	n/a	n/a	9.3	0.5	5.6%	5.7	61.7%	1.5	16.2%	0.3	3.2%	20.0	
ESP HOK VL2440	n/a	454	n/a	n/a	n/a	n/a	n/a	n/a	24.1	0.5	1.9%	12.7	52.6%	3.4	14.2%	1.7	7.0%	19.8	
ESP PGP VL2440	n/a	632	n/a	n/a	n/a	n/a	n/a	n/a	55.2	0.9	1.7%	28.8	52.1%	2.2	4.1%	-0.2	-0.3%	41.9	
ESP PMP VL0010	n/a	4267	n/a	n/a	n/a	n/a	n/a	n/a	93.6	0.1	0.2%	59.1	63.1%	-4.4	-4.7%	-6.6	-7.0%	4.1	
ESP PMP VL1012	n/a	799	n/a	n/a	n/a	n/a	n/a	n/a	20.6	0.2	1.0%	14.1	68.4%	1.9	9.3%	0.6	3.0%	8.3	
ESP PMP VL1218	n/a	875	n/a	n/a	n/a	n/a	n/a	n/a	22.5	0.0	0.0%	15.5	68.8%	2.0	8.9%	2.0	8.9%	10.2	
ESP PS VL1012	n/a	105	n/a	n/a	n/a	n/a	n/a	n/a	1.9	0.0	0.0%	1.4	70.4%	-0.3	-15.7%	-0.3	-15.7%	9.6	
ESP PS VL1218	n/a	483	n/a	n/a	n/a	n/a	n/a	n/a	20.9	0.0	0.0%	17.7	84.8%	7.3	35.1%	6.6	31.4%	18.5	
ESP PS VL1824	n/a	447	n/a	n/a	n/a	n/a	n/a	n/a	20.1	0.0	0.0%	15.3	75.9%	4.5	22.4%	4.5	22.4%	24.0	
ESP PS VL2440	n/a	2009	n/a	n/a	n/a	n/a	n/a	n/a	73.3	0.8	1.1%	45.1	61.5%	14.0	19.2%	12.6	17.2%	14.7	

(Source: EU Member States DCF data submissions)

## 4.4 North Sea and Eastern Arctic area

### 4.4.1 EU North Sea and Eastern Arctic fleet general overview

The North Sea and Eastern Arctic area includes ICES areas IIIa, IV, VIId, I and II. The Member States with reported landings in these areas include Belgium, Germany, Denmark, France, UK, Ireland, Lithuania, Netherlands, Poland, Portugal and Sweden. Not all Member States provided effort and landings data for 2011. Thus this part of the regional analysis is limited to 2008-2010.

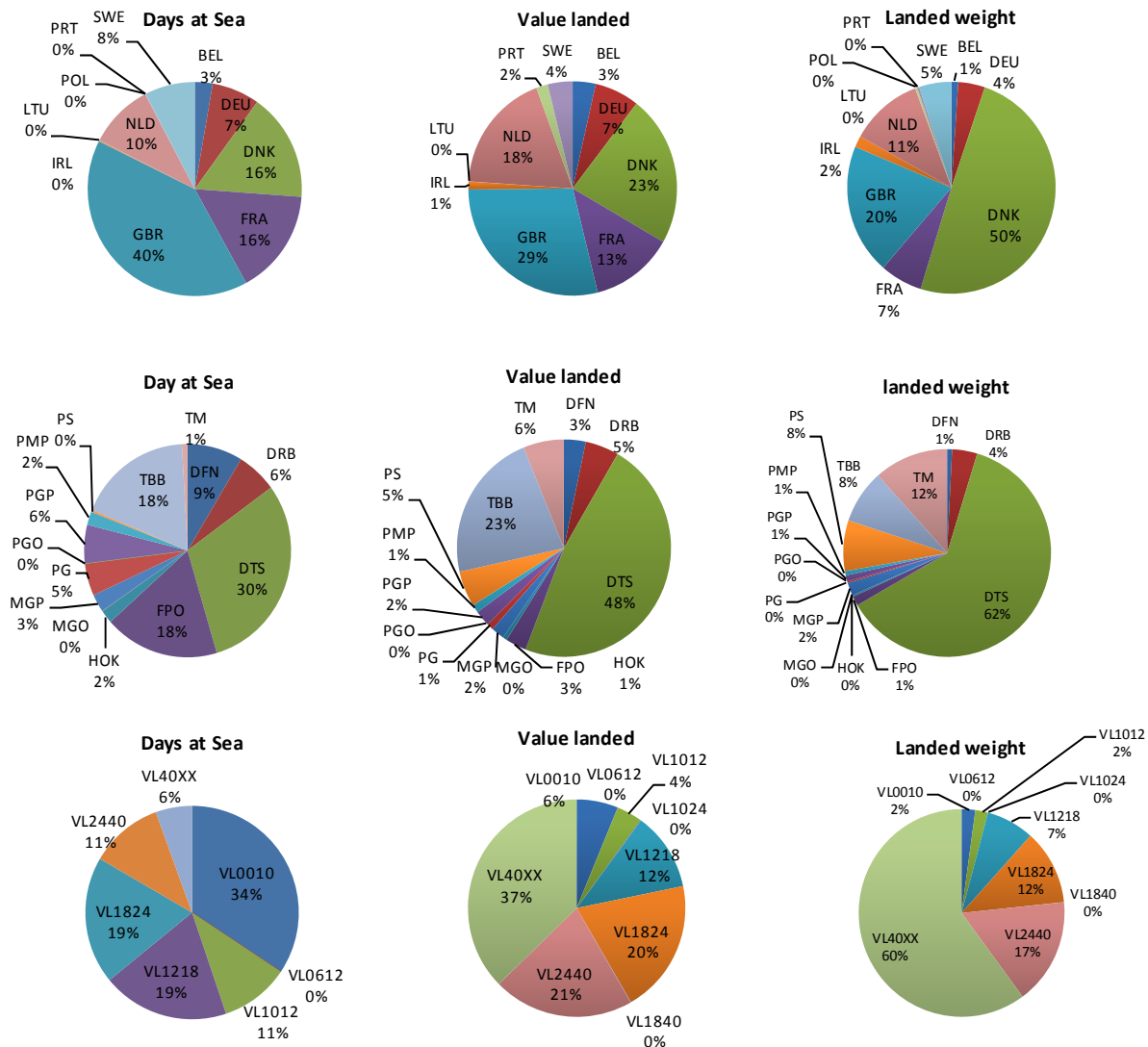


Figure 4.4.1 EU North Sea and Eastern Arctic fleet effort and landings in 2010

(Source: EU Member States DCF data submissions)

Note that for this analysis there were no effort, landings volume or value data available for Spain. Note also that French effort and landings data was not provided for 2008 and 2009 which does not affect the

2010 situation but does affect the accuracy of time series information presented in this chapter of this Annual Economic Report. Moreover, data for German pelagic fleet could not be included for confidentiality reasons. However, that fleet accounts for less than 3% of the total volume landed in that area.

Based on the data available, a total of 22,239 vessels from countries with indicated landings volume from the North Sea and Eastern Arctic area operated in Area 27 in 2010. The majority of these vessels either wholly or partially operated in other areas such as the Baltic Sea and North Atlantic. Almost half of the landings made by these fleets were registered in the North Atlantic and Baltic Sea. In 2010 the total effort (days at sea) spent by EU vessels in the North Sea and Eastern Arctic was an estimated 494 thousand days. The DTS fleet had the highest share of total days (31%), followed by FPO (18%) and then TBB (18%) (fig. 4.4.1 left). The total volume landed by the EU fleet in the North Sea and Eastern Arctic in 2010 was 1,396 million tonnes of seafood. The DTS fleet had the highest share of the total volume (62%), followed by the TM fleet (12%) and then the TBB fleet (8%) (fig. 4.4.1 centre). The total value of landings by the EU fleet in the North Sea and Eastern Arctic in 2010 was €1,462 million. The UK fleet had the highest share of the total value (29%), followed by the Danish fleet (23%) and then the Dutch fleet (18%) (fig. 4.4.1 right).

The main species in terms of volume landed in the North Sea and Eastern Arctic in 2010 was sandeel (317 thousand tonnes). There was a decline in landed volume of herring between 2005 and 2010 (with a decrease of 5% between 2008 and 2010 but considerably more since 2005). The volume of landings of sandeel increased 16% between 2008 and 2010. Data submitted suggests that landings of 'industrial' relatively low value fishery species (sandeel, sprat, some herring, Norway pout) have increased, the majority being landed by the Danish fleet. The volume of plaice and cod landings dropped in 2009 but otherwise have been relatively stable by comparison. Mackerel however has seen a significant increase in 2010 and 2011 seeing an increase in 86% between 2009 and 2011.

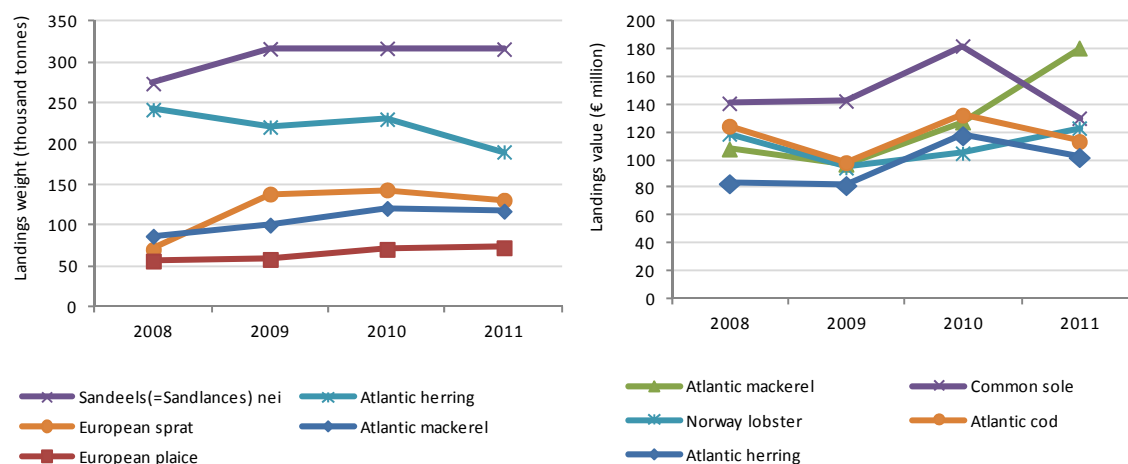


Figure 4.4.2 EU North Sea and Eastern Arctic fleet volume and value landed of top 5 species  
(Source: EU Member States DCF data submissions)

In terms of landed value, sole was the most important species in 2010 (€182 million, an increase of 12% from 2009). In recent years, sole has been the dominant species in terms of value of landings in the North Sea and Eastern Arctic from 2002 to 2010 with the exception of 2007 when Norway lobster overtook sole. The data suggests that in 2010 Norway lobster was only the 5<sup>th</sup> most important species landed in terms of value (€105 million), behind cod (€132 million), mackerel (€127 million) and herring



(€118 million). Just outside the top 5, the value of plaice landings have in recent years displayed a generally negative trend although in 2010 the value of landings increased, as well as an increase in the price for plaice in 2010.

#### **4.4.2 EU North Sea and Eastern Arctic fleet economic performance**

There were in total 138 fleets segments operating in the North Sea and Eastern Arctic region in 2010. Economic data was available for 123 of these fleet segments. These segments covered 97.5% of the total volume of landings data received for the North Sea and Eastern Arctic. The following analysis is based on the economic performance data available for the entire supra-region (including also the Baltic and the North Atlantic) and does not reflect the entire fishing activity taking place within the region only.

Table 4.4.1 shows that, in terms of landed value, the most important Member States operating in the North Sea and Eastern Arctic in 2010 were the UK, The Netherlands and Denmark, in that order. Respectively, vessels from the UK, The Netherlands and Denmark fished on average 48%, 97% and 67% of their days in the North Sea and Eastern Arctic. This activity is reflected in the value of landings of these vessels (51%, 84% and 88%, respectively for UK, The Netherlands and Denmark). UK fleets generated the highest regional landings value (€420 million) and their fleets generated a combined GVA of €419 million. Danish fleets had a high GVA in relation to their total income (66%).

French fleets generated a similar production value to the UK overall, however only 25% of French landings in value are from the North Sea and Eastern Arctic area compared to the UK's 51%. The French fleet was the most profitable fleet operating in the North Sea and Eastern Arctic in 2010, with 12.6% gross profit margin. The Dutch fleets made losses in 2010 while fleets from the remaining Member States showed positive net profit (Table 4.4.1).

Table 4.4.2 shows that the demersal trawl/seine (DTS) gear type was economically the most important fishing technique in the North Sea and Eastern Arctic region in 2010. Vessels using these gear types accounted 47% of the total landed value and 38% of the total GVA in the region. Pelagic fleets (PS and TM) generated higher GVA than beam trawl (TBB) fleets but they tend to operate more in other regions as indicated by a landed value that is 51% of the beam trawl fleets' from the North Sea and Eastern Arctic. In addition to the DTS, TBB and PS fleets, fixed pots and traps (FPO) also indicated significant profits. According to the data, TM fleets indicated a negative net profit (=loss) as well as small scale fishing vessels and some polyvalent passive gear segments.

Table 4.4.3 provides a breakdown of all the fleet segments operating in the North Sea and Eastern Arctic. The most important fleet segment in terms of landed value in 2010 was the Danish DTS over 40m segment, see table 4.4.3. This segment's landed value from the North Sea and Eastern Arctic is 96% of the total from the overall area. It consists of 29 vessels and employs 313 FTEs. These vessels generated a total income of €176 million in 2010, with GVA and net profits as a % of income of 76% and 34% respectively. The Dutch TBB over 40m segment was the second most important fleet by value in 2010. Other important fleets in the region include the UK PS over 40m segment and the UK DTS segment 18-24m and 24-40m segments.

Fuel price increased significantly in 2010 and is not expected to decrease in the near future. This will have quite a significant impact on the profitability of EU fleets, especially for the fuel intensive trawl segments such as beam, demersal and pelagic trawl.

#### **4.4.3 EU North Sea and Eastern Arctic impacting management issues**

The management plans in force in 2012 that impact on the North Sea and Eastern Arctic are mainly:

- Long-term plan for cod stocks and the fisheries exploiting those stocks (Council Regulation (EC) No 1342/2008).
- Measures for the recovery of eel - Area covered includes EU estuaries and rivers that flow into seas in ICES areas III, IV, VI, VII, VIII, IX and the Mediterranean (Council Regulation (EC) No 1100/2007 of 18 September 2007).

The long term plan for cod impacts on all fleets that have quota for cod and that interact with the cod fisheries. In 2010, 86% of cod volume was landed by the demersal trawl/seine fleet (DTS) of which 97% was landed by vessels greater than 18m. Days at sea restrictions are becoming more constraining to the fleets that will have an effect on economic performance.

Other management measures that may affect economic performance of the fleets operating in the North Sea and Eastern Arctic include marine protected areas and other legislation that has a multi-species impact.

Table 4.4.1 EU North Sea and Eastern Arctic fleet economic performance by Member State in 2010

Member State	Number of vessels in Area 27	Employment (FTE) in Area 27	North Sea days at sea (1000)	North Sea days at sea as % of total days in Area 27	North Sea volume landed (1000 tons)	North Sea volume landed as % of total volume landed in Area 27	North Sea Value landed (€ million)	North Sea value as % of total value landed in Area 27	Total income (€ million) in Area 27	Direct subsidies (€ million) in Area 27	Direct subsidies as % of total income in Area 27	Gross value added (GVA) (€ million) in Area 27	Gross value added (GVA) as % of total income in Area 27	Gross profit (€ million) in Area 27	Gross profit as % of total income in Area 27	Net profit (excluding subsidies) (€ million) in Area 27	Net profit (excluding subsidies) as % of total income in Area 27	Crew wage per FTE (€ 1000) in Area 27
Belgium	84	350	13.3	74.3%	14.8	75.0%	52.2	68.6%	81.4	1.5	1.8%	35.1	43.2%	9.2	11.3%	-0.2	-0.3%	67.7
Germany	1268	1276	35.6	30.9%	58.3	63.2%	100.9	71.5%	145.7	1.3	0.9%	76.2	52.3%	32.7	22.4%	18.9	13.0%	26.7
Denmark	1639	1807	80.3	66.7%	692.2	88.5%	333.7	88.2%	404.7	0.1	0.0%	267.0	66.0%	147.4	36.4%	58.8	14.5%	43.7
France	3000	6718	78.4	17.6%	92.6	27.0%	188.0	24.8%	839.8	5.7	0.7%	419.7	50.0%	104.7	12.5%	31.1	3.7%	46.9
UK	6409	6918	199.2	47.7%	276.4	48.1%	419.8	51.4%	943.8	37.7	4.0%	418.7	44.4%	200.2	21.2%	122.2	12.9%	29.3
Ireland	2109	3119	0.7	1.3%	24.2	8.8%	17.3	8.6%	308.5	1.0	0.3%	179.1	58.0%	78.5	25.4%	-18.0	-5.8%	31.3
Lithuania	180	212	0.2	2.7%	0.3	1.6%	0.3	4.9%	7.3	0.1	1.4%	2.1	28.8%	0.9	12.9%	0.4	5.0%	5.3
Netherlands	580	2205	48.3	96.6%	157.8	55.9%	267.4	83.8%	358.5	0.0	0.0%	136.6	38.1%	43.7	12.2%	-2.2	-0.6%	38.0
Poland	721	1268	0.2	0.3%	4.3	3.8%	0.0	0.0%	55.0	14.8	27.0%	21.8	39.6%	10.4	18.9%	6.2	11.2%	9.0
Portugal	4832	16045	0.4	0.1%	5.1	2.9%	26.2	8.7%	345.5	1.8	0.5%	216.4	62.6%	82.7	23.9%	20.7	6.0%	8.0
Sweden	1417	990	37.4	44.1%	70.3	34.4%	56.6	54.8%	142.3	0.0	0.0%	72.7	51.1%	44.7	31.4%	-0.9	-0.7%	13.8

Note: excludes inactive vessels

(Source: EU Member States DCF data submissions)

Table 4.4.2 EU North Sea and Eastern Arctic fleet economic performance by gear type in 2010

Gear type	Number of vessels in Area 27	Employment (FTE) in Area 27	North Sea days at sea (1000)	North Sea days at sea as % of total days in Area 27	North Sea volume landed (1000 tons)	North Sea volume landed as % of total volume landed in Area 27	North Sea Value landed (€ million)	North Sea value as % of total value landed in Area 27	Total income (€ million) in Area 27	Direct subsidies (€ million) in Area 27	Direct subsidies as % of total income in Area 27	Gross value added (GVA) (€ million) in Area 27	Gross value added (GVA) as % of total income in Area 27	Gross profit (€ million) in Area 27	Gross profit as % of total income in Area 27	Net profit (excluding subsidies) (€ million) in Area 27	Net profit (excluding subsidies) as % of total income in Area 27	Crew wage per FTE (€ 1000) in Area 27
DFN	2637	5811	42.7	22.5%	10.8	16.9%	48.0	22.5%	286.7	4.1	1.4%	168.4	58.7%	43.6	15.2%	12.7	4.4%	20.4
DRB	1109	2195	31.0	43.5%	54.6	46.6%	74.1	51.2%	210.2	2.9	1.4%	109.2	52.0%	36.4	17.3%	-11.0	-5.2%	31.8
DTS	2792	14276	150.7	35.7%	864.6	70.3%	694.5	52.1%	1804.5	33.5	1.9%	858.5	47.6%	372.5	20.6%	157.3	8.7%	31.7
FPO	3655	4447	88.5	32.7%	20.6	27.2%	46.6	26.6%	263.5	4.2	1.6%	160.2	60.8%	77.2	29.3%	44.9	17.0%	16.3
HOK	1250	3300	10.0	10.2%	3.0	10.9%	8.7	10.2%	152.0	4.3	2.8%	83.2	54.8%	11.4	7.5%	0.0	0.0%	18.3
MGO	162	109	0.1	0.5%	0.0	1.7%	0.0	0.5%	11.7	0.0	0.1%	7.4	63.0%	2.5	21.3%	1.0	8.9%	44.9
MGP	144	306	13.5	69.5%	28.1	74.3%	29.4	82.0%	38.5	0.1	0.4%	20.4	53.1%	6.3	16.3%	2.7	7.1%	46.2
PG	4841	2719	24.4	7.7%	3.6	7.5%	14.9	29.2%	66.6	8.3	12.4%	26.2	39.3%	1.0	1.6%	-12.9	-19.4%	3.1
PGO	119	110	0.1	0.7%	0.0	0.0%	0.0	0.1%	8.9	0.0	0.0%	7.1	79.8%	2.3	26.3%	1.5	17.3%	43.3
PGP	3571	5185	28.7	14.0%	13.4	46.4%	33.9	44.3%	135.5	1.0	0.7%	79.8	58.9%	19.8	14.6%	1.6	1.2%	8.8
PMP	1627	9818	10.1	7.4%	9.2	18.5%	17.8	21.2%	244.3	0.5	0.2%	155.4	63.6%	21.0	8.6%	-8.1	-3.3%	7.4
PS	290	5842	1.4	4.8%	110.1	29.0%	77.7	29.4%	412.1	8.1	2.0%	245.5	59.6%	102.4	24.8%	66.3	16.1%	23.8
TBB	739	2337	88.5	85.0%	116.4	88.4%	326.6	85.8%	396.4	5.9	1.5%	169.4	42.7%	65.5	16.5%	28.5	7.2%	37.8
TM	449	2209	4.3	9.0%	161.7	16.8%	90.0	25.9%	408.9	5.8	1.4%	179.7	44.0%	83.5	20.4%	-14.3	-3.5%	42.7

(Source: EU Member States DCF data submissions)

Table 4.4.3 EU North Sea and Eastern Arctic fleet economic performance by fleet segment in 2010

Fleet segment	Number of vessels in Area 27	Employment (FTE) in Area 27	North Sea days at sea (1000)	North Sea days at sea as % of total days in Area 27	North Sea volume landed (1000 tons)	North Sea volume landed as % of total volume landed in Area 27	North Sea Value landed (€ million)	North Sea value as % of total value landed in Area 27	Total income (€ million)	Direct subsidies (€ million)	Direct subsidies as % of total income in Area 27	Gross value added (GVA) (€ million)	Gross value added as % of total income in Area 27	Gross profit (€ million)	Gross profit as % of total income in Area 27	Net profit (excluding subsidies) (€ million)	Net profit (excluding subsidies) as % of total income in Area 27	Crew wage per FTE (€ 1000) in Area 27
NLD TBB VL2440	34	236	5.0	100%	8.8	100%	26.1	100.0%	26.7	0.0	0.0%	9.5	35.5%	3.2	12.0%	1.8	6.9%	25.2
DEU TBB VL2440	10	40	1.8	100%	4.4	100%	9.6	100.0%	9.8	0.0	0.3%	3.4	34.4%	2.1	21.6%	1.2	12.1%	28.5
NLD PG VL0010	207	184	4.0	100%	2.2	100%	8.6	100.0%	8.6	0.0	0.0%	2.0	23.7%	-0.7	-8.2%	-2.0	-22.8%	7.5
DNK PMP VL1824	16	80	1.5	100%	2.8	100%	7.2	100.0%	12.4	0.0	0.0%	7.8	63.3%	3.0	24.6%	0.7	5.7%	48.9
NLD DRB VL0010	16	49	0.4	100%	2.1	100%	6.4	100.0%	6.4	0.0	0.0%	5.9	91.9%	4.8	74.7%	4.5	70.4%	11.2
DNK TBB VL1824	17	55	2.6	100%	2.8	100%	4.6	100.0%	5.9	0.0	0.0%	3.2	55.0%	0.4	7.5%	-1.4	-23.6%	37.4
DNK TBB VL1218	11	20	1.8	100%	1.3	100%	3.1	100.0%	2.4	0.0	0.0%	1.3	55.4%	0.2	9.3%	-0.3	-11.2%	38.1
NLD TBB VL1218	12	27	0.9	100%	0.8	100%	1.9	100.0%	1.9	0.0	0.0%	1.0	53.3%	0.4	18.5%	0.0	1.8%	12.0
BEL TBB VL1218	5	12	0.7	100%	0.5	100%	1.4	100.0%	1.0	0.0	0.8%	0.3	32.4%	-0.2	-21.4%	-0.5	-48.9%	39.6
FRA DRB VL2440	1	29	0.2	100%	0.2	100%	0.7	100.0%	4.7	0.0	0.8%	2.1	45.5%	0.6	13.4%	0.4	8.6%	51.4
DEU TBB VL0010	10	7	1.3	100%	0.3	100%	0.6	100.0%	0.6	0.0	0.0%	0.3	53.3%	0.2	34.9%	0.2	26.7%	0.1
NLD DTS VL0010	27	1	0.1	100%	0.0	100%	0.1	100.0%	0.1	0.0	0.0%	0.0	-5.5%	-0.1	-83.3%	-0.1	-147.2%	22.2
NLD TBB VL1824	170	583	18.6	100%	19.1	100%	46.3	100.0%	47.8	0.0	0.0%	19.3	40.4%	1.0	2.2%	-4.9	-10.3%	23.2
NLD TBB VL40XX	64	430	12.8	100%	36.1	100%	121.4	100.0%	122.1	0.0	0.0%	56.3	46.1%	32.5	26.6%	21.8	17.9%	53.0
DEU TBB VL1218	134	131	16.4	100%	11.0	100%	23.6	99.8%	23.5	0.2	1.0%	13.7	58.1%	5.1	21.7%	3.6	15.4%	36.5
FRA MGP VL2440	4	23	0.8	99%	2.4	100%	3.4	99.7%	3.8	0.1	1.9%	1.4	36.2%	0.3	6.9%	-0.3	-7.0%	48.4
DNK DRB VL1012	24	17	1.2	99%	9.9	100%	2.0	99.6%	2.4	0.0	0.0%	1.3	56.0%	0.5	19.4%	-0.4	-14.9%	30.7
DEU TBB VL1824	61	81	8.2	100%	6.4	99%	14.5	99.5%	15.7	0.2	1.5%	7.9	50.6%	2.9	18.7%	1.6	10.4%	37.2
NLD DTS VL1824	12	77	2.0	100%	2.9	100%	6.9	99.3%	7.3	0.0	0.0%	2.7	37.1%	0.7	9.6%	-0.2	-2.1%	23.0
DEU DRB VL2440	4	1	0.2	87%	2.9	90%	2.4	98.9%	2.5	0.0	0.1%	1.6	66.4%	0.8	32.8%	0.1	2.7%	831.1
GBR TBB VL1012	14	7	0.8	97%	0.2	98%	0.7	98.4%	1.0	0.1	8.0%	0.3	29.0%	0.2	19.9%	0.1	11.0%	14.1
BEL TBB VL1824	34	91	6.1	98%	4.6	98%	17.2	97.9%	17.7	0.1	0.6%	7.6	42.9%	1.7	9.5%	0.0	0.0%	60.6
BEL DTS VL1824	2	9	0.5	98%	0.5	98%	1.5	97.1%	1.7	0.0	1.2%	0.2	11.7%	-0.4	-25.1%	-0.9	-54.8%	63.0
DNK DTS VL40XX	29	313	4.9	79%	474.7	94%	155.4	95.5%	176.3	0.0	0.0%	133.3	75.6%	99.5	56.4%	59.4	33.7%	96.1
DNK PGP VL1218	45	89	5.9	89%	6.7	96%	13.5	94.4%	12.1	0.0	0.0%	7.4	61.3%	2.5	20.9%	-0.1	-1.0%	29.9
DNK DTS VL2440	42	254	8.2	92%	88.6	89%	51.8	91.2%	59.2	0.0	0.0%	36.1	60.9%	19.3	32.6%	6.4	10.8%	55.0
NLD DTS VL2440	20	117	3.7	91%	7.6	93%	19.8	90.7%	22.5	0.0	0.0%	9.5	42.2%	4.2	18.6%	2.3	10.1%	40.8
DNK DTS VL1824	68	275	10.5	88%	47.8	89%	39.5	89.4%	47.2	0.0	0.0%	27.5	58.2%	11.1	23.5%	0.9	1.9%	41.4
DEU DTS VL2440	16	53	2.0	73%	9.3	71%	15.2	87.0%	17.7	0.1	0.3%	10.1	56.7%	5.3	29.8%	4.0	22.8%	82.6

(Source: EU Member States DCF data submissions)

Table 4.4.3 EU North Sea and Eastern Arctic fleet economic performance by fleet segment in 2010 contd.

Fleet segment	Number of vessels in Area 27	Employment (FTE) in Area 27	North Sea days at sea (1000)	North Sea days at sea as % of total days in Area 27	North Sea volume landed (1000 tons)	North Sea volume landed as % of total volume landed in Area 27	North Sea Value landed (€ million)	North Sea value as % of total value landed in Area 27	Total income (€ million) in Area 27	Direct subsidies (€ million) in Area 27	Direct subsidies as % of total income in Area 27	Gross value added (GVA) (€ million) in Area 27	Gross value added (GVA) as % of total income in Area 27	Gross profit (€ million) in Area 27	Gross profit as % of total income in Area 27	Net profit (excluding subsidies) (€ million) in Area 27	Net profit (excluding subsidies) as % of total income in Area 27	Crew wage per FTE (€ 1000) in Area 27
GBR TBB VL1218	28	36	2.4	90%	0.8	87%	2.2	84.2%	4.0	0.3	8.7%	1.1	26.3%	0.7	18.5%	-0.2	-5.6%	8.7
DEU DFN VL1218	12	13	0.4	35%	0.3	43%	1.7	83.4%	2.2	0.1	2.6%	1.7	78.7%	0.7	31.1%	0.6	25.9%	67.9
GBR DTS VL40XX	12	139	1.8	76%	19.0	83%	33.2	81.3%	49.0	2.3	4.6%	24.5	50.1%	13.0	26.5%	10.4	21.3%	83.2
GBR DTS VL1824	215	1065	24.5	67%	38.8	78%	81.9	78.4%	117.2	6.2	5.3%	42.7	36.4%	18.7	15.9%	10.3	8.8%	22.6
FRA TBB VL1218	7	23	0.8	66%	0.4	75%	1.6	74.2%	2.6	0.0	0.0%	1.1	42.0%	0.0	1.6%	-0.3	-11.7%	45.8
DNK DTS VL1218	168	313	15.4	72%	34.9	60%	31.3	73.6%	46.0	0.1	0.2%	27.1	58.9%	9.5	20.6%	1.1	2.3%	29.7
FRA DRB VL1218	87	273	10.4	75%	8.7	63%	20.0	73.1%	35.3	0.1	0.4%	17.7	50.2%	4.5	12.8%	0.7	1.9%	48.4
DNK PMP VL0010	109	19	2.8	53%	0.7	64%	1.9	72.8%	2.6	0.0	0.0%	1.3	50.8%	0.3	12.7%	-0.3	-12.2%	0.0
DEU DTS VL1824	30	61	2.6	61%	3.6	40%	7.5	71.2%	11.6	0.2	1.3%	6.7	57.6%	3.3	28.1%	2.1	17.7%	40.2
FRA MGP VL1012	49	101	4.2	64%	2.3	67%	5.4	69.0%	13.2	0.0	0.2%	7.3	54.9%	2.2	16.9%	1.2	8.7%	49.9
SWE DTS VL2440	31	98	2.9	71%	2.5	23%	10.1	67.7%	19.4	0.0	0.0%	7.9	40.5%	4.6	23.9%	-1.3	-6.6%	20.0
DNK DRB VL1218	30	19	1.0	71%	10.6	62%	2.2	66.5%	3.0	0.0	0.0%	1.7	55.7%	0.5	18.1%	-1.1	-36.4%	22.0
DNK PMP VL1218	51	78	3.1	64%	4.1	46%	5.4	65.6%	11.7	0.0	0.0%	6.5	55.3%	2.2	18.4%	-0.2	-1.6%	23.5
GBR DFN VL0010	640	268	19.7	70%	2.7	47%	8.5	65.5%	13.8	0.4	2.7%	6.8	49.6%	0.5	3.6%	-1.6	-11.5%	14.1
GBR DTS VL2440	103	740	13.3	63%	44.3	70%	79.9	65.2%	142.6	7.1	5.0%	60.4	42.4%	35.5	24.9%	28.4	19.9%	33.7
SWE DTS VL1218	89	125	6.0	78%	1.2	16%	8.7	65.1%	14.8	0.0	0.0%	7.7	52.2%	4.3	29.0%	2.1	14.0%	12.4
FRA PGP VL0010	87	97	1.4	13%	0.5	43%	5.3	63.5%	6.9	0.0	0.1%	4.2	61.6%	0.9	12.7%	0.2	2.7%	34.7
FRA TM VL40XX	4	119	0.1	8%	11.9	32%	28.3	59.7%	20.7	0.0	0.0%	6.8	32.8%	0.4	1.8%	-0.2	-0.8%	54.0
GBR DRB VL2440	26	137	3.2	55%	8.4	61%	14.7	58.4%	29.1	1.0	3.3%	11.9	41.1%	8.0	27.6%	7.2	24.6%	28.5
FRA MGP VL0010	23	32	0.9	39%	0.3	8%	0.8	57.6%	4.6	0.0	1.0%	2.8	61.4%	1.2	25.7%	0.9	20.8%	51.0
SWE DTS VL1012	49	53	2.1	77%	0.2	27%	2.1	56.9%	6.0	0.0	0.0%	2.5	41.5%	1.1	17.8%	-0.4	-7.1%	10.7
BEL TBB VL2440	32	197	4.7	55%	8.2	67%	28.3	56.8%	54.4	1.1	2.1%	24.6	45.1%	7.8	14.4%	1.9	3.5%	77.0
SWE DTS VL1824	49	127	3.5	58%	2.7	18%	9.4	55.2%	20.5	0.0	0.0%	10.0	48.7%	6.5	31.5%	4.4	21.3%	24.1
DEU DTS VL40XX	8	166	1.3	62%	19.6	72%	22.8	55.1%	41.2	0.0	0.0%	20.7	50.1%	6.3	15.3%	1.5	3.7%	86.4
GBR DTS VL0010	272	316	12.5	58%	2.9	55%	8.0	54.9%	17.4	0.5	3.0%	9.3	53.3%	3.5	20.0%	2.1	11.8%	12.2
BEL DTS VL2440	4	20	0.5	53%	0.5	55%	1.9	53.3%	4.0	0.0	0.7%	2.1	53.2%	0.8	20.3%	0.2	4.0%	62.0
DNK PGP VL0010	919	197	16.2	47%	2.9	49%	6.9	51.5%	15.4	0.0	0.0%	8.4	54.6%	-1.9	-12.6%	-4.3	-27.8%	8.6
SWE PG VL0010	625	302	16.6	37%	0.7	28%	4.0	50.4%	9.6	0.0	0.0%	4.0	41.9%	-3.4	-34.9%	-8.9	-92.4%	1.4

(Source: EU Member States DCF data submissions)



## 4.5 Other Regions

### 4.5.1 EU 'other regions' fleet general overview

Although the main fishing grounds for the EU fishing fleet are the Baltic Sea, North Sea, North Atlantic and Mediterranean Sea, parts of the EU fleet operate much further afield. This analysis is concentrated on all the other regions where the EU fleets are present and operational. The majority of production in other regions is the result of high seas (over 40m) vessels however there are some regions such as Madeira and the Canary islands, where coastal fleets of EU Member States also operate.

For this analysis DCF data provided by MS was compared with FAO capture production by country and area. The coverage of DCF landings data compared to corresponding FAO statistics was calculated to be 42%. Spain is the main MS fishing in the other regions, covering around 45% of capture production in other regions (FAO data). Spain did not provide information on capacity, effort, weight and value of landings. However, economic data on costs and income as well as employment were available for this analysis. In addition, Estonia, Poland, Germany and Latvia, who collectively account for around 15% of catches in other regions (FAO data) could not provide any economic data due to confidentiality reasons. Ireland, Poland The Netherlands and the UK provided only effort, weight and value of landings.

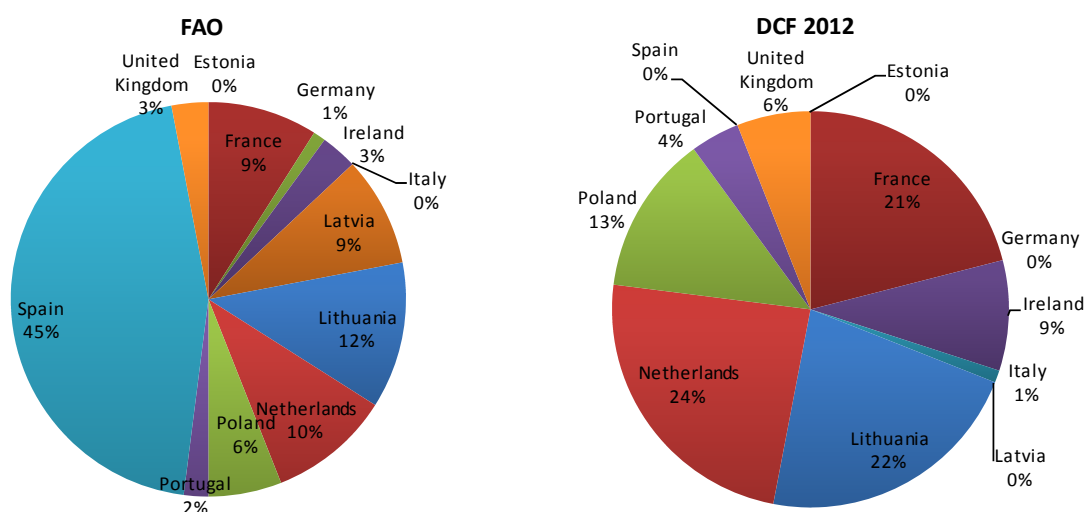


Figure 4.5.1. DCF for 2010 (weight of landings) and FAO (catches) 2010 data comparison.

(Source: FAO, left; EU Member States DCF data submissions)

There were 12 MS operating in 'other regions' in 2010. Capacity and employment (FTE) were provided by only 8 and 4 member states respectively. According to the data provided, the total number of vessels of those eight MS was 2,165. The majority of these vessels were French (92%), followed by Portuguese (7%) and Italian (1%). The data on number of vessels was available for Germany, Estonia, Latvia (Latvia did not provide data, but the number of vessels is known), France, Italy, Lithuania, Poland and Portugal. Data were not available for Spain, the United Kingdom, Ireland and the Netherlands. Capacity indicators were provided by 7 MS – Germany, Estonia, France, Italy, Lithuania, Poland and Portugal. Based on the provided data the total capacity, operated in the 'other regions' in 2010 was 133 thousand GT and 388 thousand kW. Compared to 2009, the total capacity of the EU fleet operating in 'other regions' decreased slightly. GT and kW decreased around 4.5% and 0.5% respectively in 2010 compared to 2009.

The total number of crew members operating in 'other regions' was 11,237 in 2010. Data on employment (FTE) were provided only by Spain, France, Lithuania and Portugal. Spain had the highest share of the employment (83%).

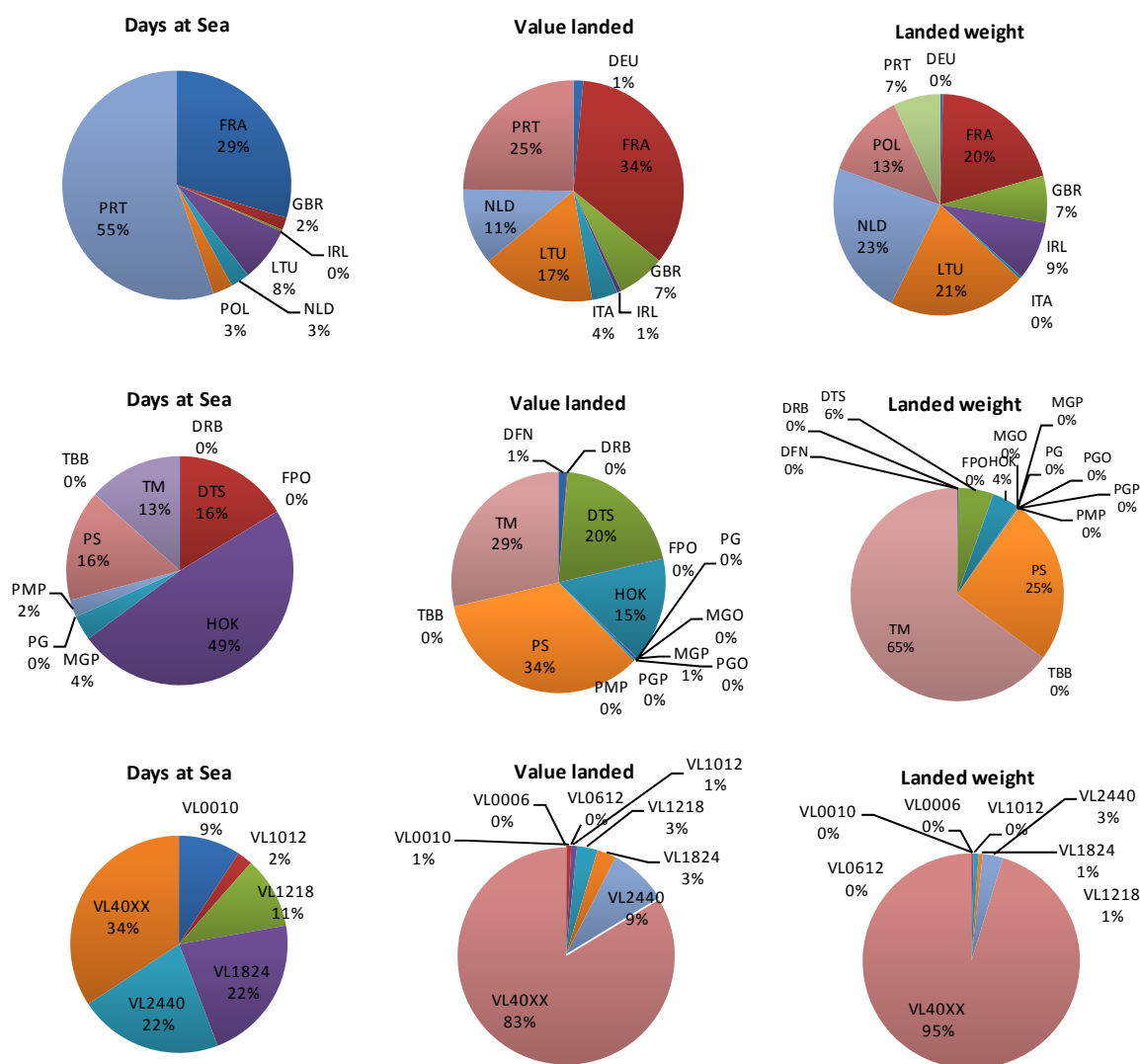


Figure 4.5.2 EU 'other regions' effort and landings in 2010

(Source: EU Member States DCF data submissions)

The number of days at sea by EU vessels operating in 'other regions' decreased in 2010 by 17% (data was only available for the UK, Ireland, Lithuania, the Netherlands, Poland, Portugal). The number of days at sea increased significantly for Dutch fleet only (by 58%), Polish and Portuguese distant fleet effort remained almost unchanged. Other countries reported smaller number of days at sea in 2010 (compared to 2009).

Only seven countries fishing in 'other regions' (France, the UK, Ireland, Italy, Lithuania, the Netherlands, Portugal) provided volume and values landings data for 2009 and 2010 (missing Spanish landings limits the use of DCF data to aggregate total landings). For these seven countries landings volume decreased



slightly (-2%) however the value of landings increased 5%. According to FAO data, total catches of EU countries in the South and Central Atlantic, Pacific and Indian Oceans amounted in 2010 to 1 million tonnes, 2% less than in 2009. The Atlantic Eastern Central area (53%), was the most important fishing area, followed by Indian Ocean (18%) and Atlantic South West (12%). The total estimated value of landings amounted to about €1 billion. The vast majority of landings volume and value was generated by the Spanish fleet - 45% and ca. 70% respectively.

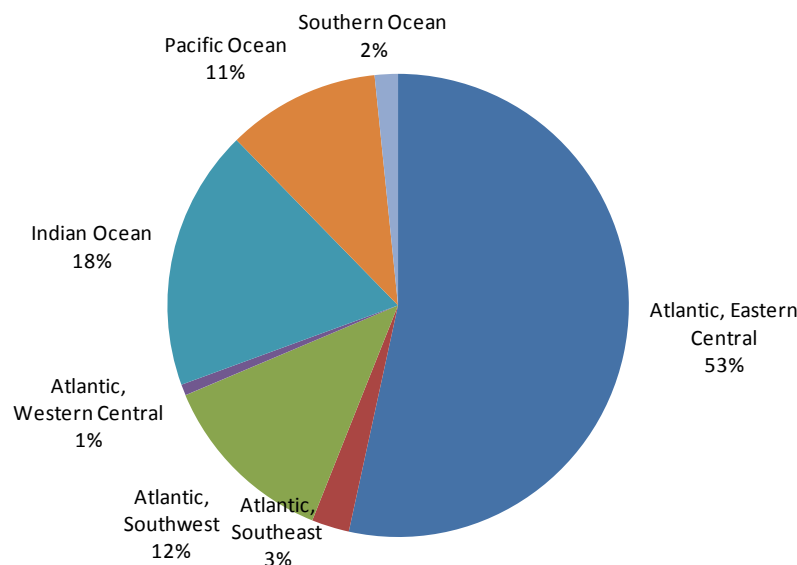


Figure 4.5.3 EU 'other regions' catches by fishing areas in 2010 (according to FAO).  
(Source: FAO)

As incomplete data sets were submitted, a coherent time series analysis of landings by species was not possible for the 'other regions'. Nonetheless, the available data on landings by species suggests that round sardinella achieved the highest landed weight by the EU fleet in 2010 in 'other regions' (106 thousand tons), followed by Chilean jack mackerel (56 thousand tons) and European pilchard (54 thousand tons). In terms of value of landings, the first three species were Yellowfin tuna (€63 million), Cunene horse mackerel (€31 million) and Skipjack tuna (€29 million).

Tables 4.5.1, 4.5.2 and 4.5.3 contain a breakdown of the economic performance of the EU fleets operating in 'other regions' by Member State, gear type and fleet segment in 2010. These tables do not include data for all the EU segments operating in 'other regions' due to missing data or confidentiality reasons.

The largest segment in terms of overall income in 2010 was the Spanish over 40m purse seine segment (€297 million), which employed 2,029 FTEs. This segment generated a GVA of 27% of total income and made calculated net profit of 3,6% of total income. In comparison the French over 40m purse seine fleet segment generated a GVA of 21% of total income and made calculated losses of around 12.5% of total income.

Table 4.5.1 EU 'other regions' fleet economic performance by MS in 2010

Member State	Number of vessels in other regions	Employment (FTE) in other regions	Other regions Days at sea (1000)	Other regions days at sea as % of total days at Sea in all regions	Other regions volume landed (1000 tons)	Other regions volume landed as % of total volume landed in all regions	Other regions Value landed (€ million)	Other regions value landed as % of total value landed in all regions	Total income (€ million) in other regions	Direct subsidies (€ million) in other regions	Direct subsidies as % of total income in other regions	GVA (€ million) in other regions	GVA as % of total income in other regions	Gross profit (€ million) in other regions	Gross profit as % of total income in other regions	Net profit (excluding subsidies) (€ million) in other regions	Net profit (excluding subsidies) as % of total income in other regions	Crew wage per FTE (€ 1000) in other regions
Germany	1	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Spain	n/a	9369	n/a	n/a	n/a	n/a	n/a	n/a	738.8	13.6	1.8%	188.3	25.5%	30.9	4.2%	-21.2	-2.9%	16.4
Estonia	1	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
France	1982	525	9.5	1.9%	89.2	19.9%	109.8	11.9%	94.8	0.0	0.0%	19.0	20.0%	-10.1	-10.6%	-12.9	-13.6%	55.4
UK	n/a	n/a	0.6	0.1%	26.5	4.4%	14.6	1.8%	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Ireland	n/a	n/a	0.1	0.2%	37.9	12.1%	2.0	1.0%	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Italy	16	n/a	n/a	n/a	1.8	0.8%	12.1	1.1%	12.1	0.0	0.0%	9.3	77.2%	8.5	70.3%	0.9	7.3%	n/a
Lithuania	11	308	2.5	23.1%	91.5	85.1%	53.2	88.6%	35.3	0.0	0.0%	2.6	7.3%	-0.8	-2.1%	-4.2	-12.0%	10.8
Netherlands	n/a	n/a	0.9	1.7%	99.5	26.1%	35.6	10.0%	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Poland	3	n/a	0.9	1.5%	55.4	32.4%	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Portugal	146	1035	17.7	4.6%	17.2	9.1%	46.7	13.5%	55.2	0.3	0.5%	24.5	44.3%	13.4	24.3%	-5.3	-9.6%	10.7

note: excludes inactive vessels

(Source: EU Member States DCF data submissions)

Table 4.5.2 EU 'other regions' fleet economic performance by gear type in 2010

Gear type	Number of vessels in other regions	Employment (FTE) in other regions	Other regions Days at sea (1000)	Other regions days at sea as % of total days at Sea in all regions	Other regions volume landed (1000 tons)	Other regions volume landed as % of total volume landed in all regions	Other regions Value landed (€ million)	Other regions value landed as % of total value landed in all regions	Total income (€ million) in other regions	Direct subsidies (€ million) in other regions	Direct subsidies as % of total income in other regions	GVA (€ million) in other regions	GVA as % of total income in other regions	Gross profit (€ million) in other regions	Gross profit as % of total income in other regions	Net profit (excluding subsidies) (€ million) in other regions	Net profit (excluding subsidies) as % of total income in other regions	Crew wage per FTE (€ 1000) in other regions
DFN	233	n/a	n/a	n/a	0.7	1.1%	4.1	1.8%	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
DRB	n/a	n/a	n/a	n/a	0.2	0.1%	0.3	0.2%	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
DTS	48	3655	5.2	0.6%	6.8	0.5%	25.3	1.3%	224.7	6.5	2.9%	61.7	27.5%	7.1	3.2%	-17.0	-7.6%	14.9
FPO	393	n/a	0.0	0.0%	0.2	0.2%	0.4	0.2%	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
HOK	655	3691	15.6	10.9%	17.6	34.7%	48.7	26.7%	274.9	0.8	0.3%	78.1	28.4%	17.6	6.4%	-14.3	-5.2%	16.2
MGP	9	64	1.1	5.0%	0.8	2.0%	1.2	2.9%	0.8	0.0	0.0%	0.5	63.6%	0.1	9.2%	-0.1	-6.4%	7.2
PGO	70	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
PGP	690	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
PMP	10	926	0.8	0.5%	0.3	0.5%	0.9	0.9%	10.9	0.1	0.7%	0.1	0.6%	-5.7	-52.4%	-6.0	-55.1%	3.9
PS	37	2593	5.1	9.0%	108.1	20.8%	102.2	23.6%	389.7	6.4	1.7%	100.7	25.8%	23.7	6.1%	-1.3	-0.3%	29.4
TM	15	308	4.3	5.4%	284.3	21.9%	90.7	18.5%	35.3	0.0	0.0%	2.6	7.3%	-0.8	-2.1%	-4.2	-12.0%	10.8

Source: EU Member States DCF data submissions)

Table 4.5.3 EU 'other regions' fleet economic performance by segment in 2010

Fleet segment	Number of vessels in other regions	Employment (FTE) in other regions	Other regions Days at sea (1000)	Other regions days at sea as % of total days at Sea in all regions	Other regions volume landed (1000 tons)	Other regions volume landed as % of total volume landed in all regions	Other regions Value landed (€ million)	Other regions % of total value landed in all regions	Total income (€ million) in other regions	Direct subsidies (€ million) in other regions	Direct subsidies as % of total income in other regions	GVA (€ million) in other regions	GVA as % of total income in other regions	Gross profit (€ million) in other regions	Gross profit as % of total income in other regions	Net profit (excluding subsidies) (€ million) in other regions	Net profit (excluding subsidies) as % of total income in other regions	Crew wage per FTE (€ 1000) in other regions
POL TM VL40XX	3	n/a	0.9	100%	55.36	100%	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
ITA DTS VL40XX	16	n/a	n/a	n/a	1.75	100%	12.1	100.0%	12.1	0.0	0.0%	9.3	77.2%	8.5	70.3%	0.9	7.3%	n/a
PRT HOK VL40XX	5	56	1.4	95%	3.31	100%	10.2	100.0%	6.5	0.1	0.9%	3.0	46.3%	2.3	35.7%	-8.9	-136.4%	12.2
PRT MGP VL1824	4	44	0.6	100%	0.55	100%	0.6	100.0%	0.6	0.0	0.0%	0.3	56.2%	0.0	6.7%	-0.1	-14.9%	6.5
GBR HOK VL40XX	n/a	n/a	0.1	100%	0.24	100%	0.4	100.0%	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
LTU TM VL40XX	11	308	2.5	71%	91.54	99%	53.2	98.7%	35.3	0.0	0.0%	2.6	7.3%	-0.8	-2.1%	-4.2	-12.0%	10.8
FRA PS VL40XX	16	415	4.9	100%	85.24	99%	94.9	91.0%	89.5	0.0	0.0%	19.1	21.3%	-8.5	-9.5%	-11.2	-12.5%	66.4
PRT MGP VL0010	5	20	0.5	65%	0.06	77%	0.3	90.2%	0.3	0.0	0.0%	0.2	78.7%	0.0	14.2%	0.0	11.0%	8.9
FRA HOK VL1824	8	n/a	n/a	n/a	0.41	52%	2.0	82.2%	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
FRA HOK VL1218	18	n/a	n/a	n/a	0.86	54%	3.9	74.2%	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
PRT HOK VL2440	21	232	6.2	65%	9.35	73%	22.2	70.9%	22.9	0.2	0.7%	8.0	34.9%	4.8	21.1%	1.0	4.2%	13.6
PRT HOK VL1218	22	248	3.4	55%	1.88	53%	5.0	47.6%	5.9	0.0	0.0%	4.0	67.9%	2.0	33.6%	1.2	19.7%	8.1
NLD TM VL40XX	n/a	n/a	0.8	27%	99.46	33%	35.5	30.9%	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
PRT HOK VL0010	62	241	2.0	13%	0.18	26%	0.6	23.9%	2.4	0.0	0.0%	1.1	46.5%	-0.3	-11.9%	-0.5	-20.3%	5.6
PRT HOK VL1012	n/a	n/a	0.6	26%	0.13	29%	0.3	21.4%	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
PRT HOK VL1824	10	72	1.8	30%	0.77	16%	2.4	15.8%	3.7	0.0	1.1%	2.5	66.0%	1.5	38.9%	0.8	22.0%	14.0
FRA MGP VL0612	n/a	n/a	n/a	n/a	0.00	20%	0.0	15.1%	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
GBR DTS VL40XX	n/a	n/a	0.1	6%	3.62	14%	6.9	14.4%	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
FRA DFN VL1824	n/a	n/a	n/a	n/a	0.58	9%	3.6	13.0%	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
PRT DTS VL2440	8	73	0.4	3%	0.85	5%	4.6	10.8%	12.4	0.0	0.0%	5.0	40.3%	3.1	25.1%	1.4	11.0%	25.7
FRA HOK VL2440	3	n/a	n/a	n/a	0.06	3%	0.3	6.8%	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
FRA HOK VL1012	25	n/a	n/a	n/a	0.18	8%	0.6	6.2%	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
GBR PS VL40XX	n/a	n/a	0.2	8%	22.53	8%	7.1	3.5%	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
FRA HOK VL0010	481	n/a	n/a	n/a	0.17	5%	0.6	3.1%	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
IRL TM VL40XX	n/a	n/a	0.0	2%	35.06	16%	2.0	2.6%	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
FRA DTS VL1012	n/a	n/a	n/a	n/a	0.24	3%	0.7	2.3%	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
PRT PMP VL0010	9	49	0.5	1%	0.08	1%	0.4	2.2%	0.5	0.0	0.0%	0.4	70.9%	-0.1	-22.7%	-0.2	-35.9%	9.7
FRA FPO VL1012	8	n/a	n/a	n/a	0.12	2%	0.2	1.5%	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a

(Source: EU Member States DCF data submissions)

Table 4.5.3 EU 'other regions' fleet economic performance by segment in 2010 contd.

Fleet segment	Number of vessels in other regions	Employment (FTE) in other regions	Other regions Days at sea (1000)	Other regions days at sea as % of total days at Sea in all regions	Other regions volume landed (1000 tons)	Other regions volume landed as % of total volume landed in all regions	Other regions Value landed (€ million)	Other regions % of total value landed in all regions	Total income (€ million) in other regions	Direct subsidies (€ million) in other regions	Direct subsidies as % of total income in other regions	GVA (€ million) in other regions	GVA as % of total income in other regions	Gross profit (€ million) in other regions	Gross profit as % of total income in other regions	Net profit (excluding subsidies) (€ million) in other regions	Net profit (excluding subsidies) as % of total income in other regions	Crew wage per FTE (€ 1000) in other regions
FRA DFN VL0010	197	n/a	n/a	n/a	0.05	1%	0.2	0.9%	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
FRA DTS VL2440	1	n/a	n/a	n/a	0.14	0%	0.5	0.6%	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
FRA DFN VL1012	35	n/a	n/a	n/a	0.05	1%	0.2	0.5%	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
FRA FPO VL0010	379	n/a	n/a	n/a	0.06	1%	0.1	0.5%	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
FRA PGP VL1012	11	n/a	n/a	n/a	0.00	1%	0.0	0.3%	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
FRA FPO VL1218	1	n/a	n/a	n/a	0.00	0%	0.0	0.3%	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
FRA DTS VL1824	22	110	4.6	10%	0.07	0%	0.2	0.1%	5.3	0.0	0.0%	0.0	-0.8%	-1.6	-29.4%	-1.8	-33.1%	13.8
FRA PGP VL0010	679	n/a	n/a	n/a	0.00	0%	0.0	0.1%	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
FRA PGO VL0010	70	n/a	n/a	n/a	0.00	0%	0.0	0.0%	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
FRA FPO VL1824	5	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
DEU TM VL40XX	1	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
ESP DTS VL2440	n/a	2376	n/a	n/a	n/a	n/a	n/a	n/a	87.3	2.7	3.1%	10.5	12.1%	-12.6	-14.4%	-20.6	-23.5%	9.7
ESP DTS VL40XX	n/a	1096	n/a	n/a	n/a	n/a	n/a	n/a	107.5	3.8	3.5%	36.9	34.3%	9.6	9.0%	3.1	2.9%	24.9
ESP HOK VL0010	n/a	31	n/a	n/a	n/a	n/a	n/a	n/a	0.8	0.0	0.0%	-0.5	-54.7%	-0.5	-54.7%	-0.7	-86.9%	0.0
ESP HOK VL1012	n/a	16	n/a	n/a	n/a	n/a	n/a	n/a	0.2	0.0	6.0%	0.1	66.3%	0.1	66.3%	0.1	66.3%	0.0
ESP HOK VL1218	n/a	32	n/a	n/a	n/a	n/a	n/a	n/a	0.3	0.0	1.0%	0.1	33.1%	0.0	-3.5%	0.0	-7.0%	2.1
ESP HOK VL1824	n/a	91	n/a	n/a	n/a	n/a	n/a	n/a	4.3	0.1	1.2%	0.1	2.8%	-0.7	-15.8%	-1.1	-25.7%	8.3
ESP HOK VL2440	n/a	1748	n/a	n/a	n/a	n/a	n/a	n/a	136.4	0.2	0.2%	43.4	31.9%	6.7	4.9%	-0.6	-0.4%	20.7
ESP HOK VL40XX	n/a	924	n/a	n/a	n/a	n/a	n/a	n/a	91.6	0.3	0.3%	16.2	17.7%	1.6	1.7%	-5.6	-6.1%	15.9
ESP PMP VL0010	n/a	553	n/a	n/a	n/a	n/a	n/a	n/a	2.5	0.1	2.1%	-2.4	-97.0%	-2.4	-97.0%	-2.4	-97.0%	0.0
ESP PMP VL1012	n/a	130	n/a	n/a	n/a	n/a	n/a	n/a	3.2	0.0	0.0%	1.6	50.1%	0.2	7.8%	0.2	7.8%	7.5
ESP PMP VL1218	n/a	51	n/a	n/a	n/a	n/a	n/a	n/a	0.6	0.0	0.0%	-0.2	-30.2%	-2.6	-428.9%	-2.6	-428.9%	11.5
ESP PMP VL2440	n/a	143	n/a	n/a	n/a	n/a	n/a	n/a	4.1	0.0	0.6%	0.7	16.7%	-0.8	-20.3%	-1.1	-25.8%	10.7
ESP PS VL0010	n/a	30	n/a	n/a	n/a	n/a	n/a	n/a	0.5	0.0	0.0%	0.5	87.0%	-0.1	-26.1%	-0.1	-26.1%	10.4
ESP PS VL1012	n/a	52	n/a	n/a	n/a	n/a	n/a	n/a	1.4	0.0	1.1%	0.7	54.1%	-0.2	-11.8%	-0.3	-22.2%	13.0
ESP PS VL1218	n/a	67	n/a	n/a	n/a	n/a	n/a	n/a	1.4	0.0	0.9%	0.5	34.5%	-0.3	-19.6%	-0.4	-28.0%	8.9
ESP PS VL40XX	n/a	2029	n/a	n/a	n/a	n/a	n/a	n/a	296.9	6.4	2.2%	80.0	26.9%	32.8	11.0%	10.7	3.6%	23.3
EST DTS VL40XX	1	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
FRA PMP VL40XX	1	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
FRA PS VL0010	21	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a

(Source: EU Member States DCF data submissions)

## **5. NATIONAL CHAPTERS**



## 5.1 BELGIUM

### 5.1.1 National fleet structure

In 2012 the Belgian fishing fleet consisted of 86 registered vessels, with a combined gross tonnage of 15,3 thousand GT and total power of 49,1 thousand kW, and an average age of 25 years. The size of the Belgian fishing fleet has decreased over the last years (between 2008 and 2012), with the number of vessels declining by 15,6% (16 vessels) and the fleet's GT and kW by 20% and 18%, respectively (fig. 5.1.1).

Table 5.1.1 Belgium national fishing fleet key indicators: 2008-2012

	2008	2009	2010	2011	2012	% change
<b>Capacity</b>						
Number of vessels	102	100	89	89	86	-15.7
Average vessel age	22	23	23	24	25	13.6
Gross Tonnage (GT, thousand)	19.3	19.0	16.0	15.8	15.3	-20.6
Power (kW, thousand)	60.6	60.6	51.6	51.2	49.1	-18.9
<b>Effort</b>						
Days at sea (thousand)	19.5	17.7	17.9	17.2		-11.9
Fishing days (thousand)	12.3	12.2	10.9	10.4		-15.0
Energy consumption (Million litres)	42.4	52.9	46.4			9.4
<b>Employment</b>						
Total Employed	458	409	400			-12.7
FTE	380	335	352			-7.4
<b>Landings</b>						
Weight (thousand tonnes)	20.0	19.0	19.8	20.1		0.7
Value (Million €)	76.3	68.0	76.2	79.4		4.2

(Source: EU Member States DCF data submissions)

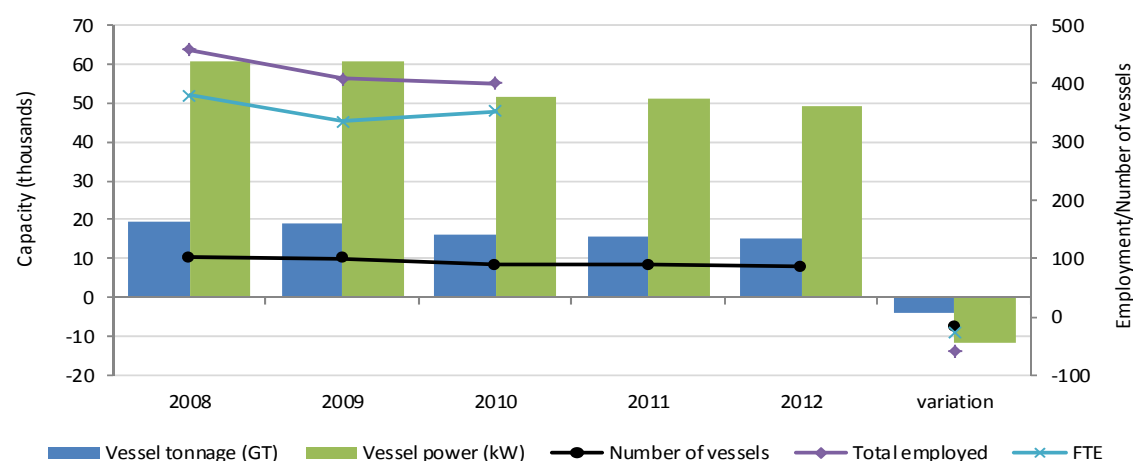


Figure 5.1.1 Belgium national fleet capacity and employment trends: 2008-2012

(Source: EU Member States DCF data submissions)

In 2011, the number of fishing enterprises in the Belgian fleet totalled 89, with the vast majority (99%), owning a single vessel. Only 1% of the enterprises owned two to five fishing vessels. Total employment in 2010 was estimated at 400 jobs and 352 FTEs. The level of employment decreased between 2008 and 2010, with total employed decreasing by 13% and the number of FTEs decreasing by 7% over the time period. However, an increase of 5% in FTE was observed between 2009 and 2010 (Table 5.1.1; fig. 5.1.1).

### 5.1.2 National fleet fishing activity and output

In 2011 the Belgian fishing fleet spent a total of around 17 thousand days at sea, 58% of which were actual fishing days (Table 5.1.1). The total number of days at sea declined by around 12% between 2008 and 2011 (but only 3% between 2009 and 2011), while total fishing days decreased during the same period. The quantity of fuel consumed in 2010 totalled around 46 million litres, an increase of around 4% from 2008. Between 2008 and 2009, total energy consumption increased by about 10 million litres but decreased again in 2010 (-12.3%), although the number of vessels remained relatively stable over the period (fig. 5.1.2, left).

The total volume of landings achieved by the Belgian fleet in 2011 was 20,1 thousand tonnes of seafood, corresponding to about €76 million in landed value. The total value and volume of landings has remained relatively stable over the period analysed, with the exception of 2009 when decreases in both were observed (fig. 5.1.2, right).

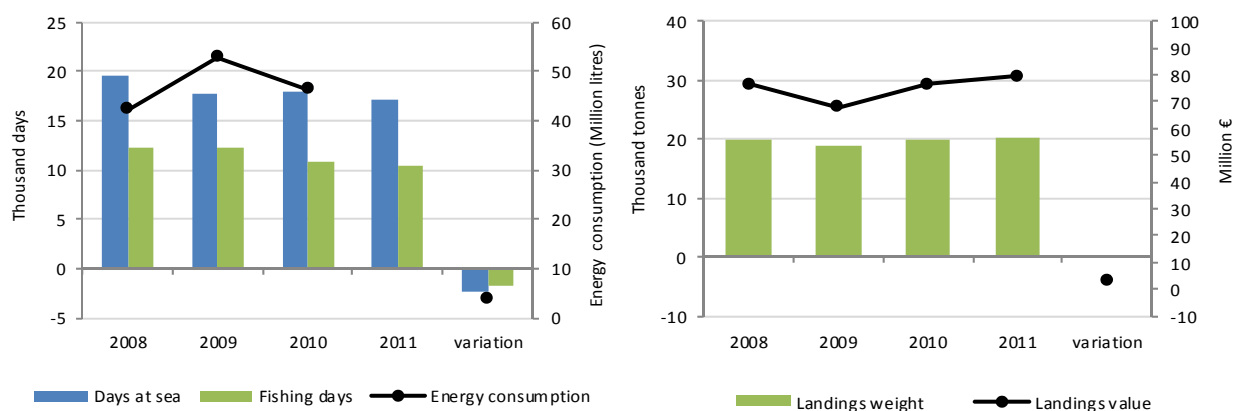


Figure 5.1.2 Belgium national fleet fishing effort (left) and landings trends (right): 2008-2011  
(Source: EU Member States DCF data submissions)

In 2010, sole accounted for the highest value of landings (€40 million) by the national fleet, followed by plaice (€6.6 million), Crangon shrimps (€4.5 million), turbot (€3.5 million) and then anglerfish (€3.2 million). In terms of landings weight, in 2010 plaice reached 5 thousand tonnes, sole (3.6 thousand tonnes) and anglerfishes nei (0,4 thousand tonnes). In 2011, the Belgium fleet landed around €8.4 million of plaice, totalling 6 thousand tonnes (fig. 5.1.3, top).

In terms of weight landed, the top species landed by the Belgium fleet included all the important value species (but not in the same order of importance) with the exception of anglerfishes and turbot. These are replaced by Atlantic cod and the Great Atlantic scallop, with €2.5 and €1.9 million landed value, respectively (fig. 5.1.3, bottom).



The prices obtained for these key species remained generally stable or increased between 2010 and 2011. Turbot and sole both achieved the highest average price per kilo by the Belgian national fleet in 2011 (€11 per kg), followed by monkfish (€10 per kg) (fig. 5.1.4, left). Sole accounted for 52% of the total landings value obtained by the Belgium fleet in 2010, declining to 47% of turnover in 2011, while plaice increased in importance from 9% in 2010 to 11% in 2011 (fig. 5.1.4, right).

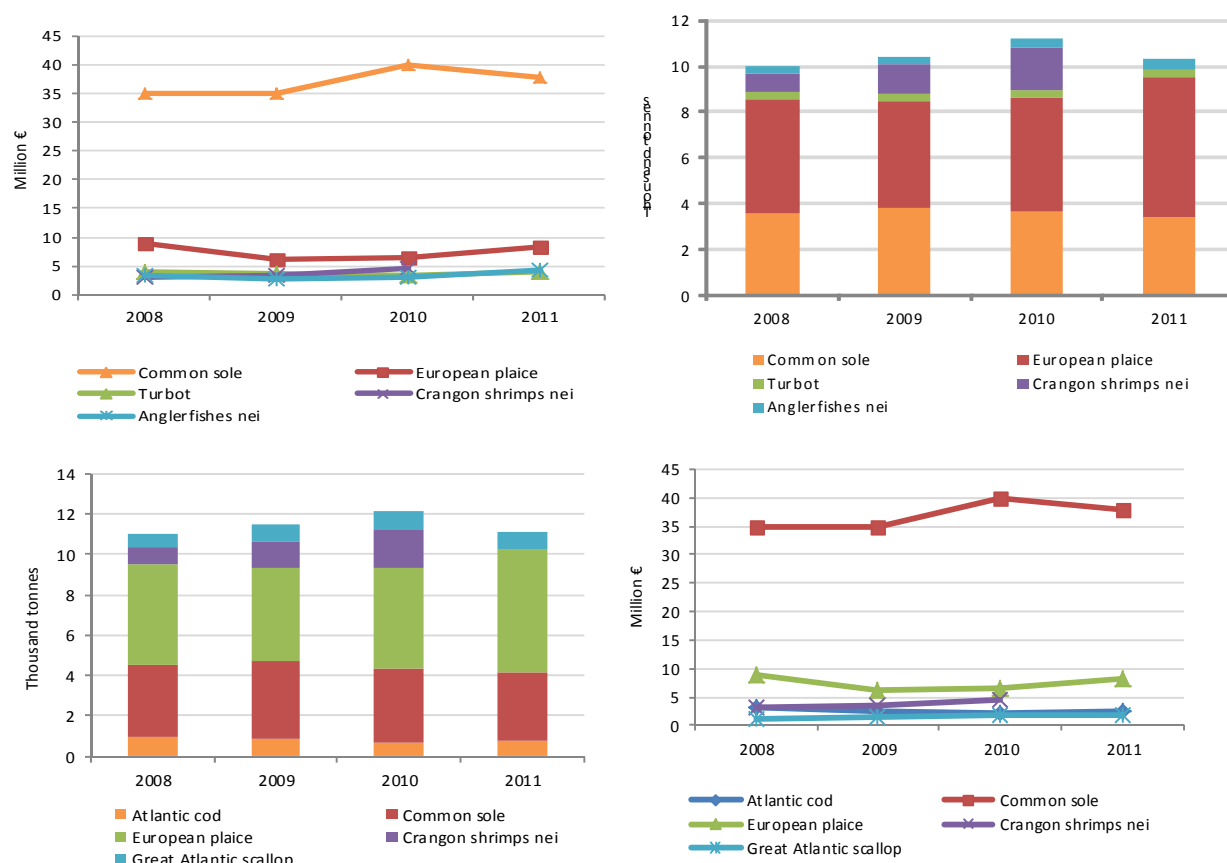


Figure 5.1.3 Belgium national fleet total landings by key species in value (top) and weight (bottom), with corresponding weights and values: 2008-2011  
(Source: EU Member States DCF data submissions)

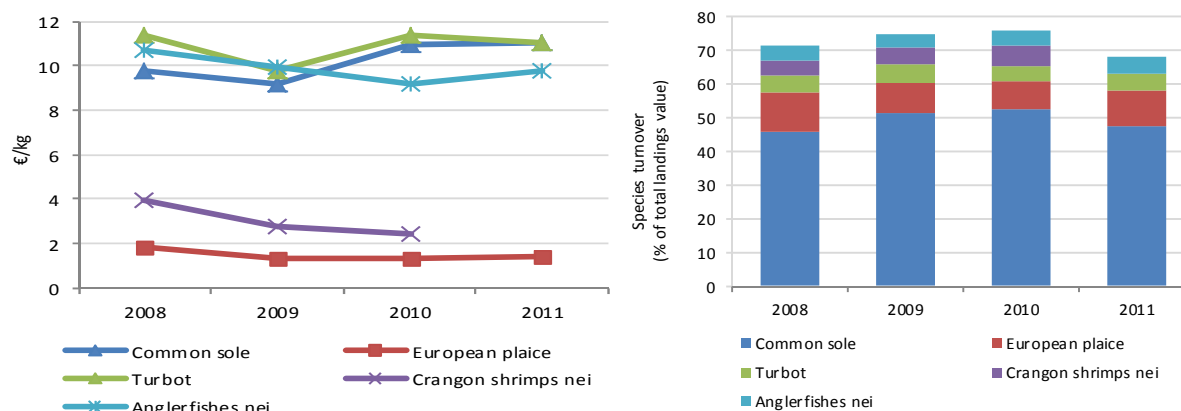


Figure 5.1.4 Total average price (left) and turnover as a percentage of total value of landings (right) for the five key species landed by the Belgium national fleet: 2008-2011  
(Source: EU Member States DCF data submissions)

### 5.1.3 National fleet economic performance

The total amount of income generated by the Belgian national fleet in 2010 was €81,4 million. This consisted of €76,3 million in landings value, €3,6 million in non-fishing income and €1,5 million in direct subsidies (Table 5.1.2). The Belgian fleet's total income increased 2% between 2008 and 2010 (fig. 5.1.5), but increased 17% between 2009 and 2010. Total operating costs incurred by the Belgian national fleet in 2010 equated to €67 million, amounting to 86% of total income. The largest expenditures were crew wages (€23,7 million) and fuel costs (€21,7 million) (Table 5.1.2). In fact, Belgium fishers earn the highest wages in the EU fleet, at an average of €74 thousand in 2010. Between 2008 and 2010, total operating costs decreased 19%, largely due to lower fuel costs, which amounted to almost 43% of total income in 2008.

In terms of profitability, the total amount of GVA, gross profit and net profit (excluding subsidies) generated by the Belgian national fleet in 2010 were positive, amounting to €36,3 million, €10,3 million and €0,9 million, respectively (Table 5.1.2, fig. 5.1.5). Hence, the Belgium fleet has gone from a loss to a profit making position during the period analysed. Increased total income combined with a decrease in total operating costs partly explain this positive trend. In 2010, the Belgian fleet had an estimated depreciated replacement value of € 66,1 million. Investments by the fleet amounted to €10.7 million in 2010.

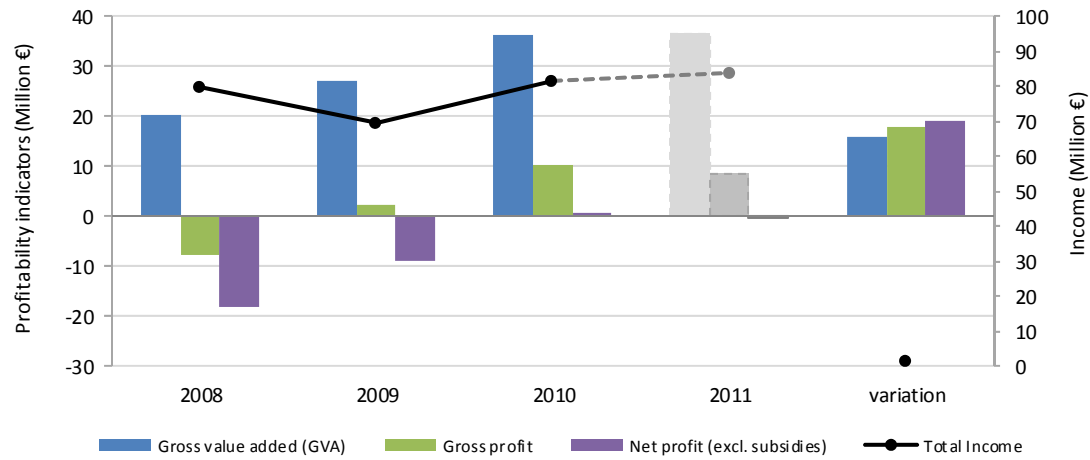


Figure 5.1.5 Belgium national fishing fleet economic performance trends: 2008-2011 (variation 2010-2008)  
 (Source: EU Member States DCF data submissions)

Table 5.1.2 Belgium national fishing fleet economic performance indicators: 2008-2011.

Forecast figures for 2011 are highlighted in blue and values are also presented as a percentage of total income (shaded grey columns)

	2008	As % of total income	2009	As % of total income	2010	As % of total income	2011	As % of total income	% change (2010-08)
<b>Income (Million €)</b>									
Landings income	76.28	95.5%	64.40	92.6%	76.25	93.7%	78.66	93.9%	0%
Direct subsidies	1.30	1.6%	0.86	1.2%	1.46	1.8%	1.16	1.4%	12.5%
Other income	2.26	2.8%	4.29	6.2%	3.64	4.5%	3.97	4.7%	60.9%
Fishing rights income	0	0%	0	0%	0	0%	0	0%	
<b>Total Income</b>	<b>79.84</b>	<b>100%</b>	<b>69.56</b>	<b>100.0%</b>	<b>81.35</b>	<b>100.0%</b>	<b>83.79</b>	<b>100.0%</b>	<b>1.9%</b>
<b>Expenditure (Million €)</b>									
Crew wages	25.32	31.7%	22.42	32.2%	23.70	29.1%	25.41	30.3%	-6.4%
Unpaid labour	2.84	3.6%	2.26	3.3%	2.24	2.8%	2.46	2.9%	-21.2%
Energy costs	34.13	42.7%	19.34	27.8%	21.67	26.6%	24.91	29.7%	-36.5%
Repair costs	5.36	6.7%	4.92	7.1%	4.94	6.1%	4.75	5.7%	-7.9%
Variable costs	11.89	14.9%	10.19	14.6%	9.88	12.1%	9.49	11.3%	-16.9%
Non-variable costs	6.70	8.4%	7.29	10.5%	7.15	8.8%	7.15	8.5%	6.8%
Rights costs	0.0	0%	0	0%	0	0%	0	0%	
<b>Total operating costs</b>	<b>86.24</b>	<b>108.0%</b>	<b>66.41</b>	<b>95.5%</b>	<b>69.58</b>	<b>85.5%</b>	<b>74.15</b>	<b>88.5%</b>	<b>-19.3%</b>
Depreciation costs	10.44	13.1%	8.47	12.2%	8.66	10.6%	8.56	10.2%	-17.1%
Opportunity costs of capital	-0.04	-0.1%	2.83	4.1%	0.75	0.9%	1.18	1.4%	1931%
<b>Performance Indicators (Million €)</b>									
Gross value added (GVA)	20.47	25.6%	26.96	38.8%	36.26	44.6%	36.34	43.4%	77.2%
Gross profit (GRP)	-7.70	-9.6%	2.28	3.3%	10.32	12.7%	8.47	10.1%	234%
Net profit (incl. subsidies)	-16.80	-21.0%	-8.16	-11.7%	2.37	2.9%	1.07	1.3%	114.1%
Net profit (excl. subsidies)	-18.10	-22.7%	-9.02	-13.0%	0.91	1.1%	-0.09	-0.1%	105%
<b>Capital value (Million €)</b>									
Fleet depreciation replacement value	53.46		72.56		66.09		69.32		23.6%
Investments	3.85		7.26		10.71				177.9%
Financial position (%)	69		74		88				27.5%

(Source: EU Member States DCF data submissions)

### 5.1.4 Fleet composition

The Belgian fleet is highly diversified with a broad range of vessel types targeting different species predominantly in the AREA27. The national fleet consisted of 15 fleet segments in 2010, with 2 inactive length classes consisting of 4 vessels. These vessels are classed as inactive if they did not land any catch in 2010. Three of the active fleet segments made losses in 2010 while 5 made an overall profit (information lacking for 7 segments). Table 5.1.3 provides a breakdown of key performance indicators for all Belgian fleet segments in 2010. A short description of the three most important segments in terms of total value of landings is provided below.

**TBB VL1824** – 34 vessels make up this segment and are based predominantly in AREA27. These vessels target demersal/shellfish species such as crangon shrimp, European plaice and common sole. The total value of landings was €17,6 million and around 91 FTEs were employed in this fleet segment in 2010, contributing to 23% and 26% of the total landings income and FTEs generated by the Belgian fishing

fleet, respectively. This fleet segment made a gross profit of almost €1,7 million but a net loss of €3 thousand, in 2010. The average vessel in this fleet segment made €0.5 million in income and a gross profit of €49 thousand in 2010 (fig. 5.1.6).

**TBB VL2440**— Around 32 vessels make up this segment which operate predominantly in AREA27. The fleet targets a variety of species but in particular flatfishes, such as European plaice, common sole and lemon sole. In 2010, the total value of landings reached almost €50 million and around 197 FTEs were employed in this fleet segment, contributing to 65% and 56% of the total income from landings and FTEs generated by the Belgian fishing fleet, respectively. This fleet segment was the most profitable segment, with a reported gross profit of around €7.8 million and a net profit of €1.9 million in 2010. The average vessel in this fleet segment made €1.7 million in income, and reported a gross profit of €245 thousand and net profit of €58 thousand in 2010 (fig. 5.1.7).

Table 5.1.3 Belgium national fishing fleet composition and key indicators at fleet segment level for 2010

Fleet Segment	Number of vessels	Vessel tonnage (GT)	Vessel power (kW)	Total employed	FTE (national)	Days at sea	Energy consumption (kilolitres)	Landings weight (tonnes)	Landings value (thousand €)	Direct Subsidies (thousand €)	GVA (thousand €)	Gross profit (thousand €)	Net profit (excl. subsidies) (thousand €)	Net Profit (incl. subsidies) (thousand €)	Cluster
DFN	5	238	1745	25	13	328	113	180.127	1123.088	164.463	-360	-795.64	163	328	
VL1012	1	21	221			4									CLUSTER2
VL1218	2	30	853	17	9	162									
VL1024								180.127	1123.088	164.463			1165.089	1329.552	CLUSTER4
VL1824	2	187	671	8	4	162									CLUSTER2
VL1224							112.98				-359.83	-795.64	-1001.81	-1001.81	CLUSTER4
DRB	2	278	881	7	6	436	480	596.043	1224.696	1.405	679	268.798	168	169	
VL1824	1	68	219	3	2	159									CLUSTER1
VL2440	1	210	662	4	4	277									CLUSTER1
VL1840							479.51	596.043	1224.696	1.405	678.851	268.798	168.0686	169.4736	CLUSTER1
DTS	6	1315	4157	38	31	1647	2679	1451.144	5062.247	48.641	2332	396.777	-752	-704	
VL1012				3	2	105									CLUSTER3
VL1024							1109.2								CLUSTER3
VL1824	2	303	1108	13	9	526	0	482.322	1582.746	19.435	194	-417.17	-912	-892	CLUSTER3
VL2440	4	1012	3049	22	20	1016	1570	968.822	3479.501	29.206	2138	813.947	159	189	
TBB	71	13351	42063	330	300	15493	43154	17510.34	68740.14	1244.68	32454	9288.66	1372	2617	
VL1218	5	192	944	13	12	720	589	455.899	1397.812	8.635	336	-222.36	-507	-499	
VL1824	34	2848	7470	119	91	6271	9056	4698.362	17572.03	97.657	7567	1675.91	-3	95	
VL2440	32	10311	33649	198	197	8502	33509	12356.08	49770.3	1138.39	24551	7835.11	1883	3021	
Cluster name			Fleet segments												
CLUSTER1 DRBVL1840			DRB VL1824		DRB VL2440										
CLUSTER2 DFNVL1024			DFN VL1012		DFN VL1218 <sup>1</sup>		DFN VL1824								
CLUSTER3 DTSVL1024			DTS VL1024		DTS VL1824										
CLUSTER4 DFNVL1224			DFN VL1218 <sup>2</sup>		DFN VL1824										

<sup>1</sup> Income, landings; <sup>2</sup> effort and expenditure

(Source: EU Member States DCF data submissions)

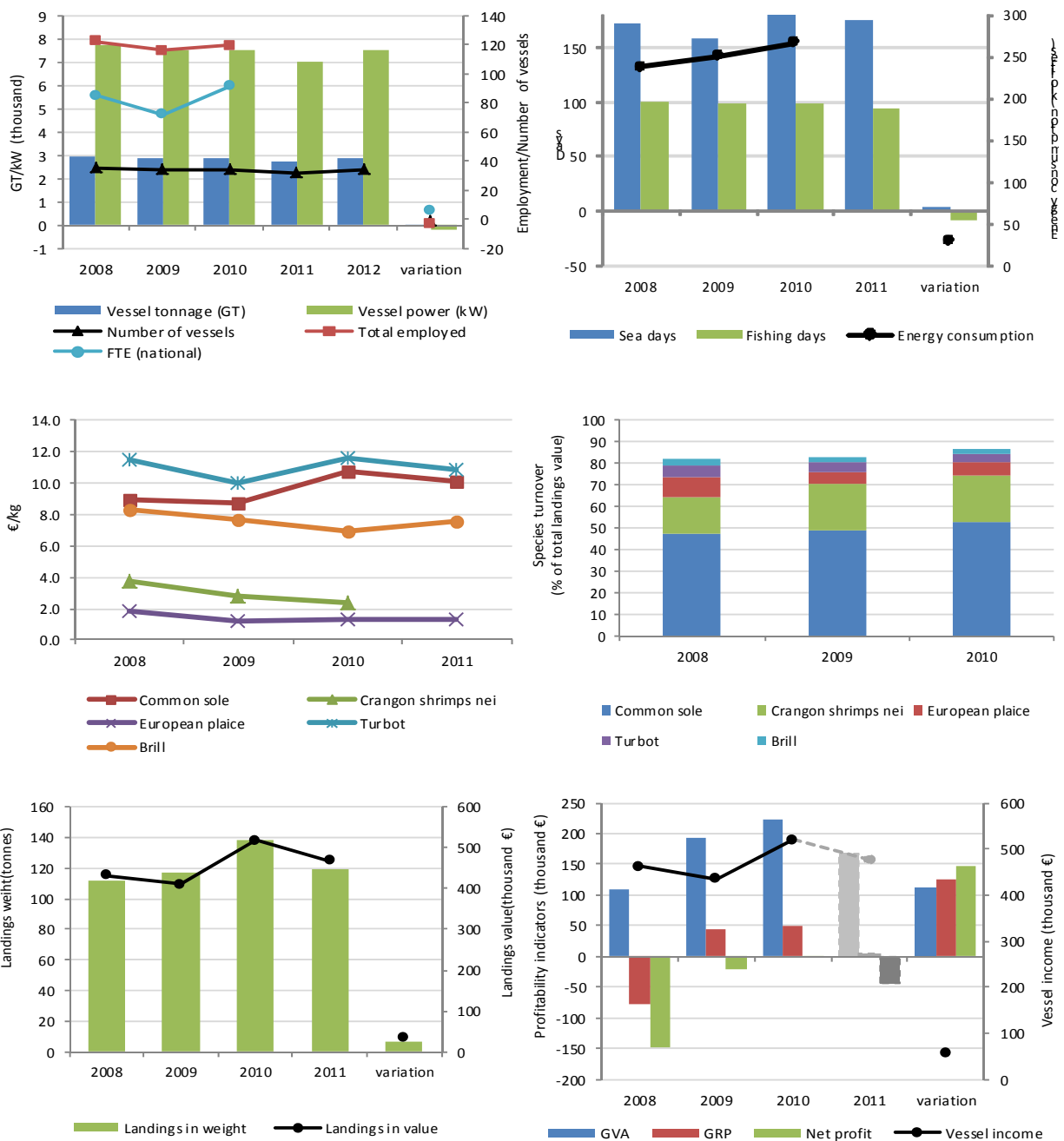


Figure 5.1.6 Key indicators for the average vessel in the Belgium TBB VL1824 fleet segment, 2008-2011: top left – fleet capacity and employment trend; top right – average fishing activity and effort; middle left – average prices (€/kg) for key species; middle right - turnover as a percentage of total value of landings for key species; bottom left – average landings in value and weight: bottom right – main economic performance indicators for the average vessel (variation 2010-2008)

(Source: EU Member States DCF data submissions)

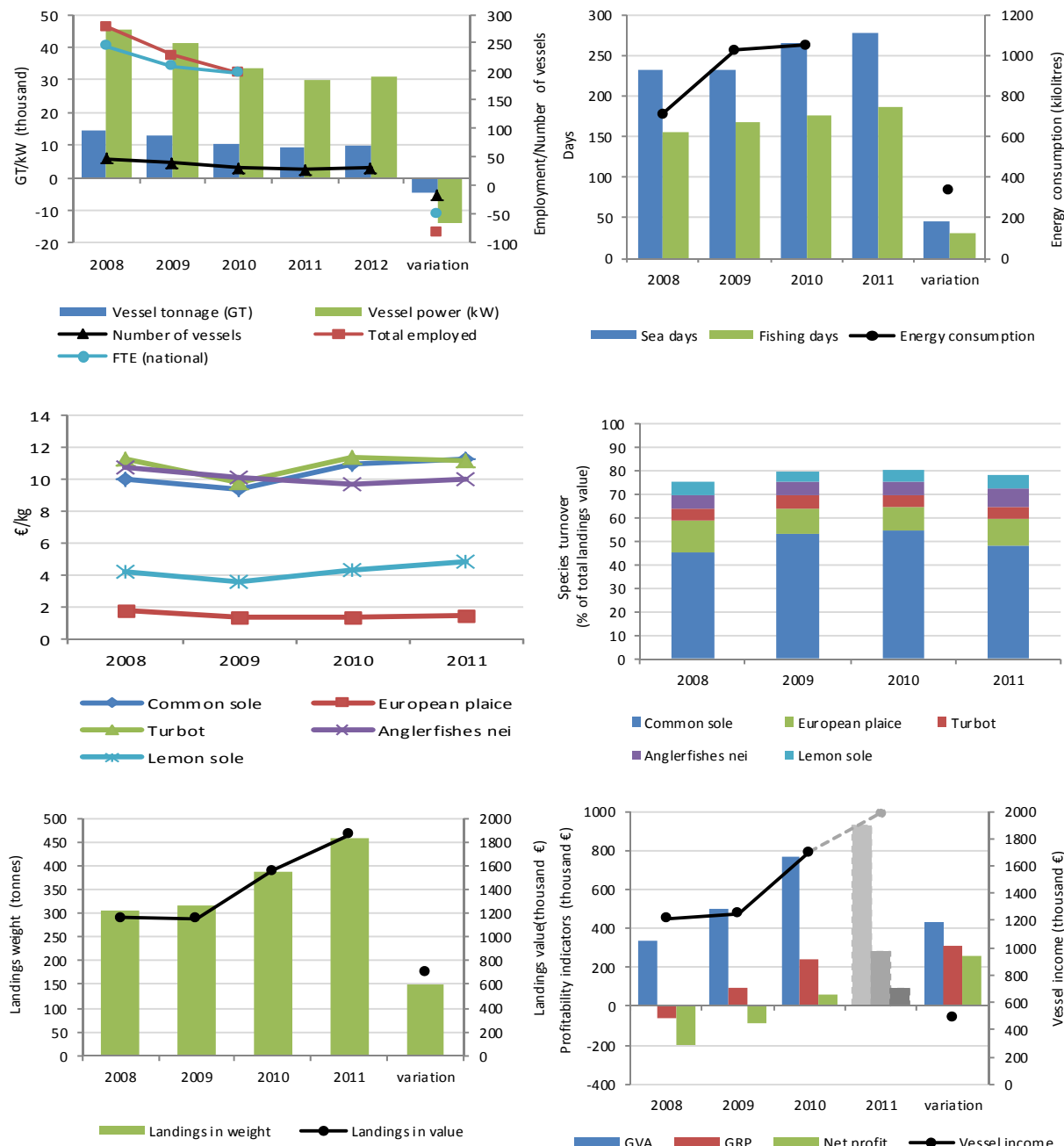


Figure 5.1.7 Key indicators for the average vessel in the Belgium TBB VL2440 fleet segment 2008-2011: top left – fleet segment capacity and employment trend; top right – average fishing activity and effort; middle left – average prices (€/kg) for key species; middle right - turnover as a percentage of total value of landings for key species; bottom left – average landings in value and weight; bottom right – main economic performance indicators for the average vessel (variation 2010-2008)

(Source: EU Member States DCF data submissions)

**DTSVL2440** – 4 vessels make up this segment and are based predominantly in the AREA27. These vessels target demersal/pelagic species such as Atlantic mackerel, common sole and rajas rays nei. The total value of landings was €3,48 million and around 20 FTEs were employed in this fleet segment in 2010, contributing to 4,6% and 0,6% of the total income from landings and FTEs generated by the Belgian fishing fleet, respectively. This fleet segment was profitable, with reported modest gross profit of around €0,8 million in 2010.

#### **5.1.5 Assessment for 2011 and 2012**

The expected increase in landings income combined with stabilised operating costs suggest positive profits for 2011. GVA and Net profit are therefore expected to increase to €36,34 and €1,07 million in 2011, respectively (Table 5.1.2, fig. 5.1.5).

#### **5.1.6 Data issues**

No major data issues.



## 5.2 BULGARIA

### 5.2.1 National fleet structure

In 2012 the Bulgarian fishing fleet consisted of 1010 registered vessels, with a gross tonnage of 5 thousand GT and a total power of 33,7 thousand kW. The size of the Bulgarian fleet has fluctuated between 2008 and 2012. There was a net increase of 18,3% and 5.8% in the number of vessels and total kilowatts, respectively. Conversely, the fleet underwent a net decrease of 7.8% in total GT over the time period analysed. The fleet had an average age of 22 years in 2012, an increase of 3.7% compared to the average age in 2008 (Table 5.2.1, fig. 5.2.1).

Table 5.2.1 Bulgaria national fishing fleet key indicators: 2008-2012

	2008	2009	2010	2011	2012	% change
<b>Capacity</b>						
Number of vessels	854	1118	1383	1010	1010	18.3
Average vessel age	14	15	20	22	22	57.1
Gross Tonnage (GT, thousand)	5.4	8.0	7.5	5.0	5.0	-7.8
Power (kW, thousand)	31.8	50.9	48.4	33.7	33.7	5.8
<b>Effort</b>						
Days at sea (thousand)	10.8	12.8	16.0	16.1		49.2
Fishing days (thousand)	10.8	12.8	16.0	16.1		49.2
Energy consumption (Million litres)	1.4	1.4	1.6			13.5
<b>Employment</b>						
Total Employed	1433	1732	3933			174.5
FTE	1507	1430	2889			91.7
<b>Landings</b>						
Weight (thousand tonnes)	7.5	7.1	9.2	7.6		1.8
Value (Million €)	3.0	2.7	2.2	2.7		-9.0

(Source: EU Member States DCF data submissions)

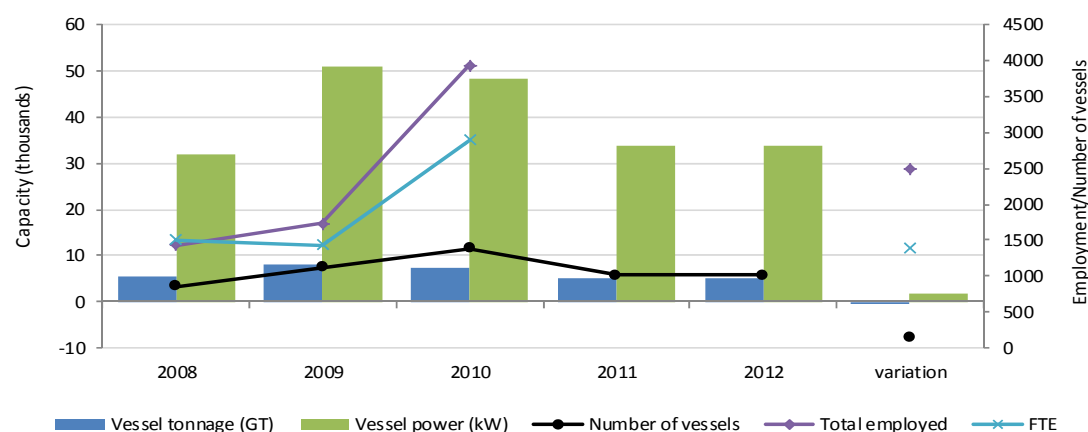


Figure 5.2.1 Bulgaria national fleet capacity and employment trends: 2008-2012 (variation 2012-2008 for all except employment, variation 2010-2008)

(Source: EU Member States DCF data submissions)

There were a total of 99 fishing enterprises in the Bulgarian fleet in 2011. The vast majority of fishing enterprises, 68%, owned a single vessel and 30% of enterprises owned two to five fishing vessels. Only 2 fishing enterprises owned six or more fishing vessels. Total employment was estimated at around 3933 jobs and 2889 FTEs in 2010. The reported figures for 2008 and 2009 are significantly higher, almost threefold in the case of total employment, suggesting that data for these previous years were incomplete (Table 5.2.1; fig. 5.2.1).

## 5.2.2 National fleet fishing activity and output

In 2011, the Bulgarian fishing fleet spent a total of around 16,1 thousand days at sea, all of which, according to the data, were actual fishing days (Table 5.2.1). The total number of days at sea in 2011 increased by about 50% from 2008. The total quantity of fuel consumed in 2010 was estimated at 1,6 million litres, a 13,5% increase on 2008 figures (fig. 5.2.2, left).

The total volume of landings achieved by the Bulgarian fleet in 2011 was around 7,6 thousand tonnes of seafood, a decrease of around 18% compared to 2010. The total value of seafood landed in 2011 was €2,7 million, an increase of around 25% compared to 2010 results (fig. 5.2.2, right).

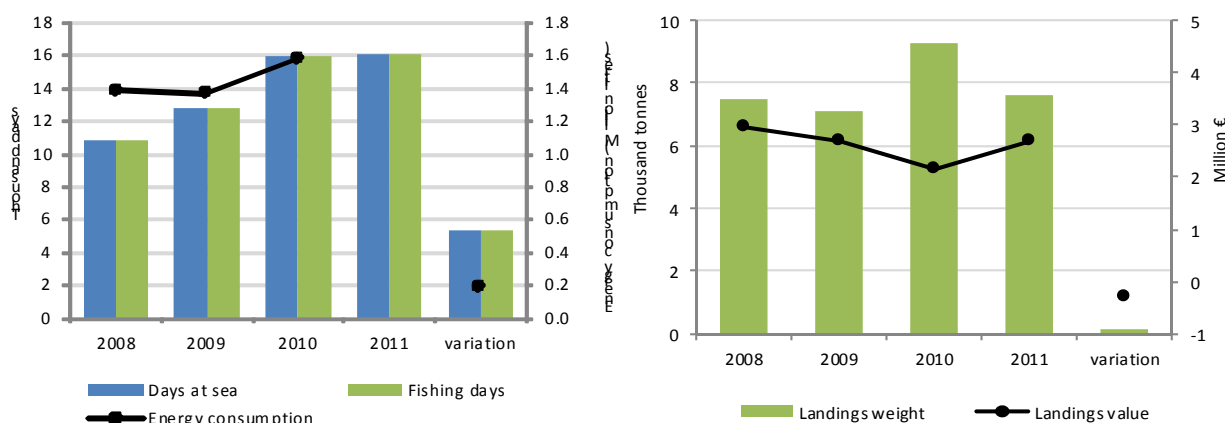


Figure 5.2.2 Bulgaria national fleet fishing effort (left) and landings trends (right):2008-2011 (variation 2011-2008)  
(Source: EU Member States DCF data submissions)

In 2010 European sprat obtained the highest landed value (€0,8 million), followed by Thomas Rapa whelk (€0,7 million), picked dogfish (€0.23 million), Mediterranean horse mackerel (€0.19 million) and red mullet (€0.16 million). In terms of landings composition, in 2010 Thomas rapa whelk was the most abundant species landed (4,8 thousand tonnes), followed by European sprat (4 thousand tonnes) (fig. 5.2.3). Landings data for Thomas Rapa whelk was not available for 2011. The top key species in terms of landed value corresponded to the key species in terms of landed weight (fig. 5.2.3).

The average prices obtained for these key species have remained generally stable between 2008 and 2011. Red mullet achieved the highest average price per kilo by the Bulgarian fleet in 2010 (€3.6 per kg), followed by picket dogfish (€2.1 per kg) and Mediterranean horse mackerel (1.2 € per kilo) (fig. 5.2.4, left). Sprat accounted for 39% of the total landings value obtained by the Bulgarian fleet in 2010, increasing to 48% of turnover in 2011, but still a reduction from almost 60% in 2009. Plaice increased in importance from 9% in 2010 to 11% in 2011. European sprat accounted for almost 40% of turnover in 2010 while Thomas rapa whelk, which was the most landed species in weight in 2010, accounted for almost 32% of turnover, (fig. 5.2.4, right).

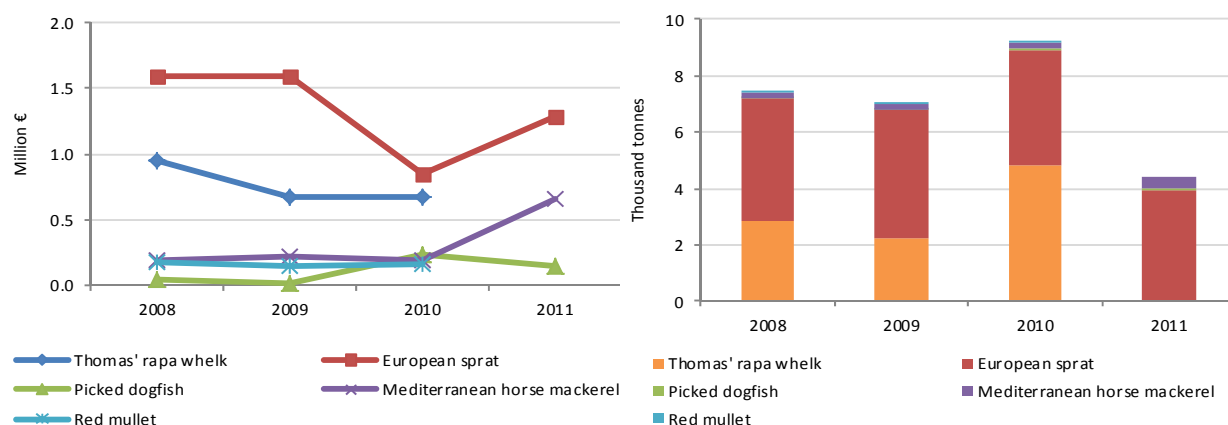


Figure 5.2.3 Bulgaria national fleet total landings by key species in value and weight:2008-2011

(Source: EU Member States DCF data submissions)

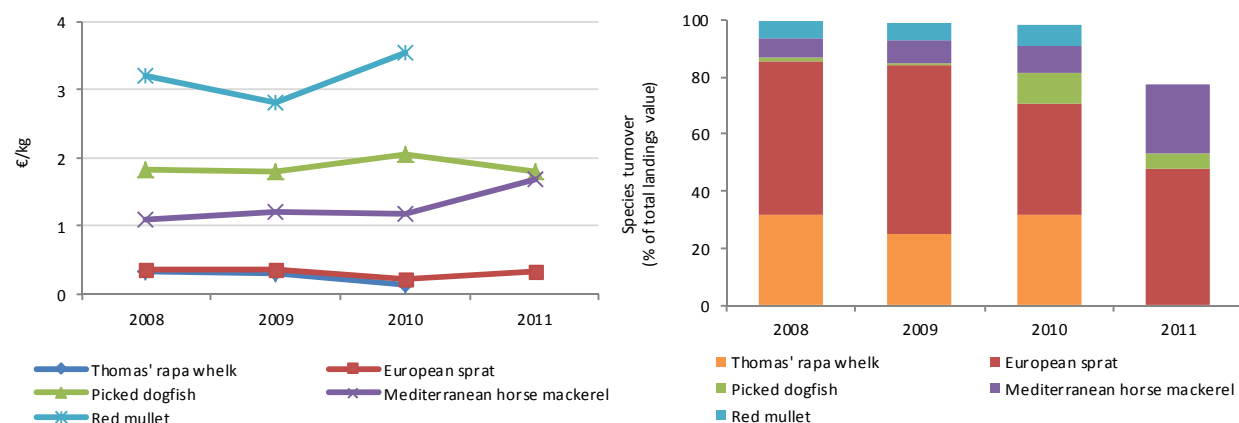


Figure 5.2.4 Total average price (left) and turnover as a percentage of total value of landings (right) for the five key species landed by the Bulgaria national fleet: 2008-2011

(Source: EU Member States DCF data submissions)

### 5.2.3 National fleet economic performance

The total amount of income generated by the Bulgarian national fleet in 2010 was €4,65 million. This consisted of €2,15 million from landings, €1,67 million in other income and €0,83 thousand in direct income subsidies (Table 5.2.2). The total income of the Bulgarian fleet increased by around 50% between 2009 and 2010. However, total fleet operating costs in 2010 amounted to €8,03 million, almost 173% of total income. Operating costs have increased more than two-fold since 2008, augmenting 68% between 2009 and 2010 only. The largest expenditure items were crew wages (€1,99 million) and fuel costs (€1,77 million) (Table 5.2.2). Crew wages have increased significantly (150%) since 2008, whereas fuel costs increased by 28% relative to 2008.

In terms of profitability, and according to the data, the Bulgarian national fleet performed negatively in 2010, generating an overall GVA of -€1,7 million. The Bulgarian fleet suffered a gross loss of € 4,2 million and net loss (excluding subsidies) of €5,4 million in 2010 (Table 5.2.2, fig. 5.2.5). The data suggests that the profitability of the Bulgarian fleet has significantly worsened in recent years, not surprising considering that income from landings has decreased while total operating costs have increased significantly over the time period analysed. The Bulgarian fleet had an estimated depreciated

replacement value of €16,5 million in 2010 and investments in the range of €3,4 million in the same year (Table 5.2.2).

Table 5.2.2 Bulgaria national fishing fleet economic performance indicators: 2008-2011.

Forecast figures for 2011 are highlighted in blue and values are also presented as a percentage of total income (shaded grey columns)

	2008	As % of total income	2009	As % of total income	2010	As % of total income	2011	As % of total income	% change (2010-08)
<b>Income (Million €)</b>									
Landings income	3.23	74.2%	3.07	98.6%	2.15	46.3%	2.70	68.0%	-33.3%
Direct subsidies	0	0%	0	0%	0.83	17.8%	0.41	10.5%	
Other income	1.12	25.8%	0.04	1.4%	1.67	35.9%	0.85	21.5%	48.2%
Fishing rights income	0	0%	0	0%	0	0%	0	0%	
<i>Total Income</i>	4.35	100%	3.12	100%	4.65	100%	3.97	100%	6.8%
<b>Expenditure (Million €)</b>									
Crew wages	0.80	18.3%	1.18	37.8%	1.99	42.8%	1.77	44.5%	150.2%
Unpaid labour	0.11	2.5%	0.27	8.7%	0.49	10.4%	0.42	10.6%	346.6%
Energy costs	1.39	31.9%	0.76	24.4%	1.77	38.1%	2.14	54.0%	27.7%
Repair costs	0.65	15.0%	0.61	19.7%	0.96	20.7%	0.97	24.5%	46.9%
Variable costs	0.29	6.6%	1.77	56.8%	2.04	43.9%	2.06	52.0%	614.6%
Non-variable costs	0.25	5.7%	0.19	6.0%	0.78	16.8%	0.57	14.3%	214.7%
Rights costs	0	0%	0	0%	0	0%	0	0%	
<i>Total operating costs</i>	3.48	79.9%	4.78	153.4%	8.03	172.7%	7.94	200%	130.8%
Depreciation costs	0.05	1.1%	0.20	6.4%	0.70	15.0%	0.45	11.3%	1418.6%
Opportunity costs of capital	-0.12	-2.7%	0.11	3.6%	0.48	10.4%	0.16	4.0%	504.8%
<b>Performance Indicators (Million €)</b>									
Gross value added (GVA)	1.78	40.9%	-0.21	-6.9%	-1.73	-37.2%	-2.19	-55.3%	-197.2%
Gross profit	0.87	20.1%	-1.66	-53.4%	-4.21	-90.5%	-4.38	-110.5%	-580.8%
Net profit (incl. subsidies)	0.95	21.8%	-1.97	-63.3%	-4.55	-98.0%	-4.42	-111.3%	-580.4%
Net profit (excl. subsidies)	0.95	21.8%	-1.97	-63.3%	-5.38	-115.8%	-4.83	-121.7%	-667.8%
<b>Capital value (Million €)</b>									
Fleet depreciated replacement value	2.01	46.3%	2.41	77.4%	16.49	354.8%	9.45	238%	718.7%
Investments	3.2	73.4%	1.4	44.7%	3.4	72%			5.1%
Financial position (%)	20.8		4.4		7.1				-65.8%

(Source: EU Member States DCF data submissions)

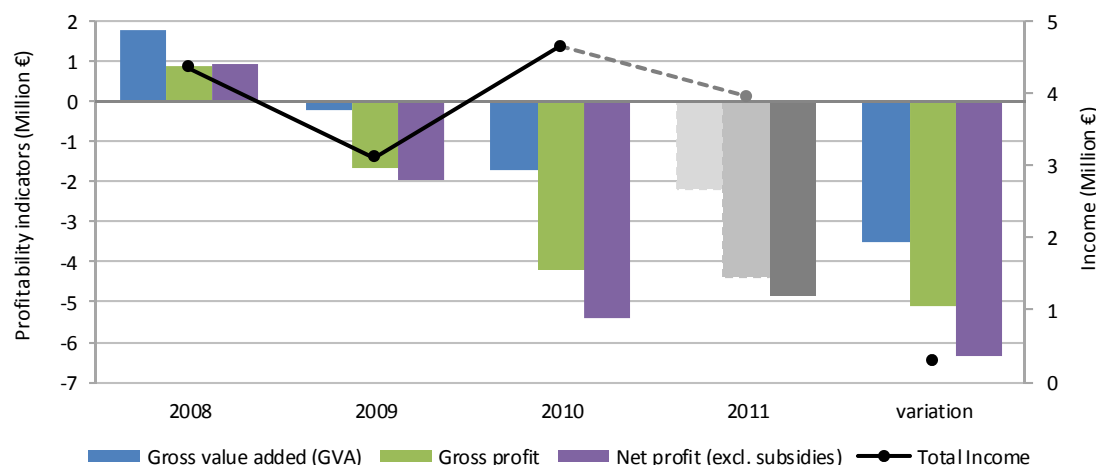


Figure 5.2.5 Bulgaria national fishing fleet economic performance trends: 2008-2011  
(Source: EU Member States DCF data submissions)

## 5.2.4 Fleet composition

The Bulgarian national fleet consisted of around 14 fleet segments in 2010. The fleet has a broad range of vessel types that operate predominantly in the Black Sea and target different species. Table 5.2.3 provides a breakdown of the key performance indicators for all the Bulgarian fleet segments in 2010. A short description of two important segment is provided below.

**Polyvalent mobile and passive gears 12-18m** – 94 vessels make up this segment and are based in the Black Sea. These vessels mainly target Thomas rapa whelk. The total value of landings was around €207 thousand and around 135 FTEs were employed in this fleet segment in 2010. This fleet segment was unprofitable in 2010, with a net loss of over €400 thousand. The average vessel in this fleet segment made almost € 14 thousand in income but when accounting for costs, generated a gross loss of -€2.4 thousand and net loss of almost -€4.3 thousand in 2010 (fig. 5.2.6).

**Polyvalent mobile and passive gears 18-24m** – 13 vessels make up this segment and are based in the Black Sea. These vessels mainly target Thomas rapa whelk and more recently, picket dogfish. The total value of landings was around €67 thousand and around 81 FTEs were employed in this fleet segment in 2010. This fleet segment was unprofitable in 2010, with a net loss of over €243 thousand. The average vessel in this fleet segment made € 51.5 thousand in income but generated a gross loss of -€13 thousand and net loss of almost -€19 thousand in 2010 (fig. 5.2.7).

Table 5.2.3 Bulgaria national fishing fleet composition and key indicators at fleet segment level for 2010

Fleet Segment	Number of vessels	Vessel tonnage (GT)	Vessel power (kW)	Total employed	FTE (national)	Days at sea	Energy consumption (kilolitres)	Landings weight (tonnes)	Landings value (thousand €)	Direct Subsidies (thousand €)	GVA (thousand €)	Gross Profit (Thousand €)	Net profit (excl. subsidies) (thousand €)	Net Profit (incl. subsidies) (thousand €)
<b>DFN</b>	<b>843</b>	<b>2389</b>	<b>21123</b>			<b>7001</b>		<b>73</b>	<b>170</b>				<b>-21</b>	<b>-21</b>
VL0006	323	217	2081			2900		36	39				-21	-21
VL0612	478	1002	12378			3929		14	50					
VL1218	31	655	4717			172		14	48					
VL1824	11	515	1947					9	33					
<b>FPO</b>	<b>49</b>	<b>151</b>	<b>1418</b>					<b>81</b>	<b>17</b>					
VL0612	49	151	1418					81	17					
<b>HOK</b>	<b>83</b>	<b>141</b>	<b>1394</b>					<b>104</b>	<b>214</b>		<b>-2954</b>	<b>-4369</b>	<b>-4890</b>	<b>-4890</b>
VL0006	30	21	186					0.004	0.003		-298	-501	-550	-550
VL0612	53	120	1208					51	105		-2655	-3868	-4340	-4340
VL1218								53	110					
<b>PG</b>				<b>3555</b>	<b>2604</b>			<b>51</b>	<b>56</b>				<b>3957</b>	<b>3957</b>
VL0006				818	584			4	3					
VL0612				2737	2020			47	52				3957	3957
<b>PMP</b>	<b>350</b>	<b>1742</b>	<b>12640</b>	<b>301</b>	<b>216</b>	<b>5984</b>	<b>1313</b>	<b>4843</b>	<b>678</b>	<b>35</b>	<b>245</b>	<b>-394</b>	<b>-651</b>	<b>-617</b>
VL0006	79	54	414			1059	84	247	35					
VL0612	164	678	7240			3504	714	2510	351					
VL1218	94	449	3080	191	135	1016	351.735	1478.489	206.988	15.339	189.289	-223.86	-408.3448	-393.0058
VL1824	13	561	1906	110	81	405	163.542	483.487	67.688	19.429	55.254	-170.07	-243.0317	-223.6027
VL2440								124	17					
<b>TM</b>	<b>58</b>	<b>3058</b>	<b>11806</b>	<b>77</b>	<b>69</b>	<b>2967</b>	<b>261</b>	<b>4094</b>	<b>1016</b>	<b>795</b>	<b>-578</b>		<b>-1001</b>	<b>-1214</b>
VL1218	31	656	5189			686		284	101					
VL1824	14	737	2739			477		417	124					
VL2440	13	1665	3878	77	69	1804	261	3393	791	795	-578		-1001	-1214

(Source: EU Member States DCF data submissions); Insufficient cluster information provided.

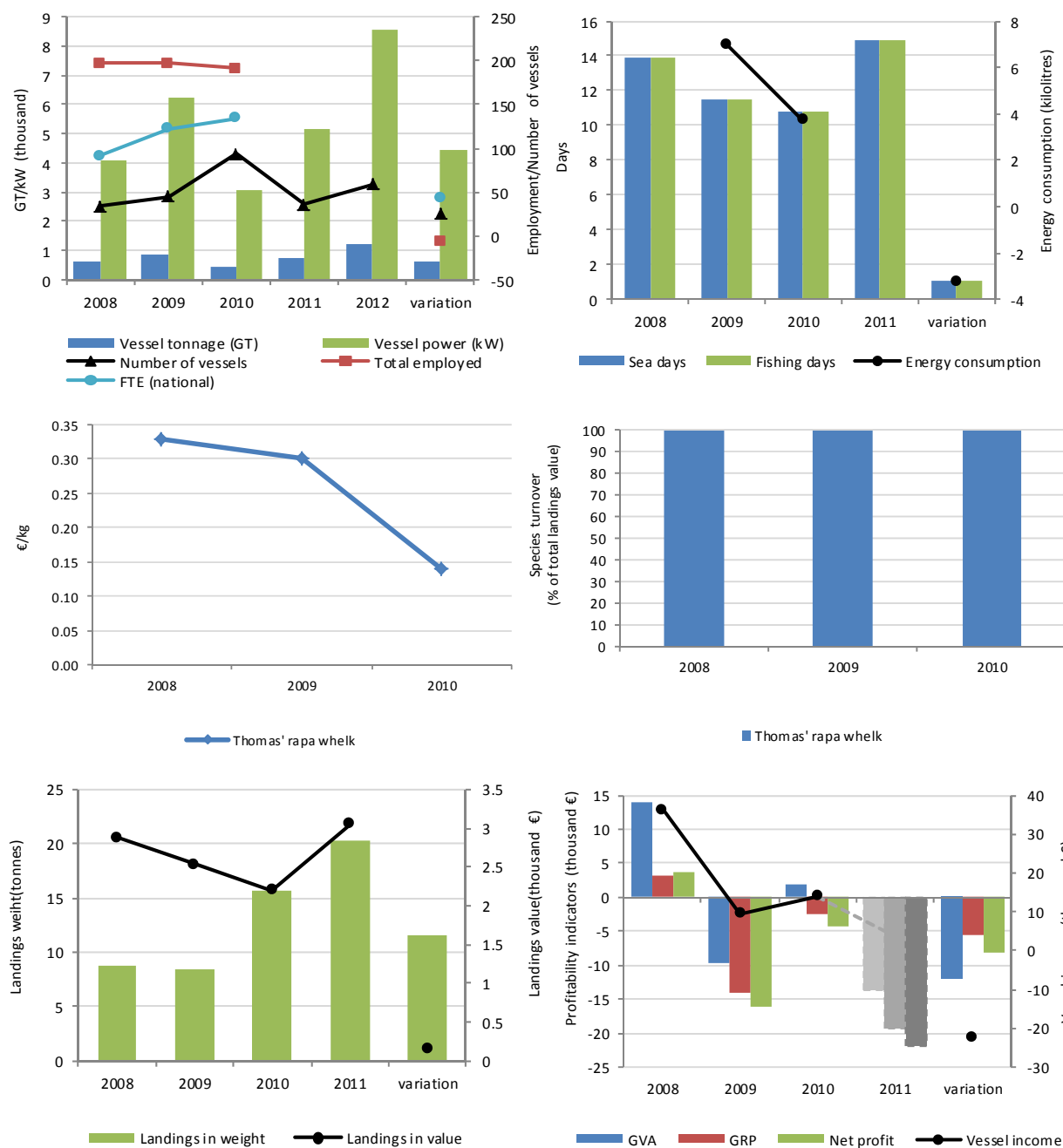


Figure 5.2.6 Key indicators for the average vessel in the Bulgaria PMP VL1218 fleet segment, 2008-2011: top left – fleet capacity and employment; top right – average fishing activity and effort; middle left – average prices (€/kg) for key species; middle right - turnover as a percentage of total value of landings for key species; bottom left – average landings in value and weight: bottom right – main economic performance indicators for the average vessel

(Source: EU Member States DCF data submissions)

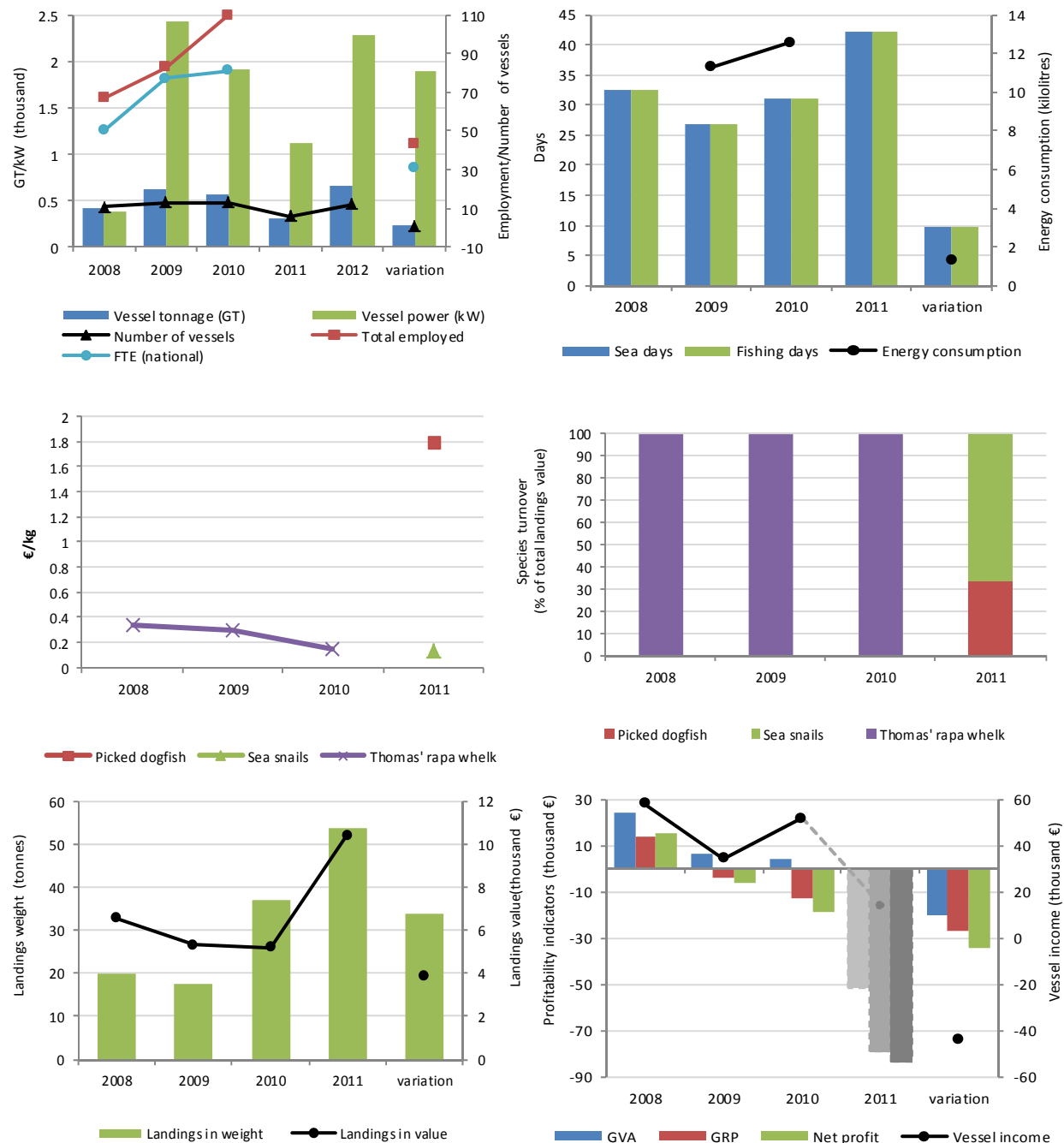


Figure 5.2.7 Key indicators for the average vessel in the Bulgaria PMP VL1824 fleet segment, 2008-2011: top left – fleet capacity and employment; top right – average fishing activity and effort; middle left – average prices (€/kg) for key species; middle right - turnover as a percentage of total value of landings for key species; bottom left – average landings in value and weight: bottom right – main economic performance indicators for the average vessel (variation 2012-2008 except for employment variation 2010-2008)

(Source: EU Member States DCF data submissions)



### **5.2.5 Assessment for 2011 and 2012**

According to the available information, total income is expected to have decreased in 2011, negatively effecting overall profit. The overall economic performance of the Bulgarian fleet is expected to have deteriorated in 2011.

### **5.2.6 Data issues**

The data submitted by Bulgaria for the 2012 call on fleet economic data was found to be inconsistent and incomplete, making it difficult to produce a comprehensive and coherent national overview.

The profitability estimates seem unrealistically low and may be due to either data inconsistencies, and only partial data reported (i.e. missing landings, employment data). Hence, many limitations were imposed on the analysis processes and consequently, many indicators may be incorrectly estimated and should be considered accordingly. The information provided on clusters was not sufficient.

Bulgaria was invited to undertake the corrective measures in order to allow a complete and sound evaluation of the fishing fleets and its economic performances.



## 5.3 CYPRUS

### 5.3.1 National fleet structure

In 2012, the Cypriot fishing fleet consisted of 858 registered vessels, with a gross tonnage of 3,5 thousand GT and a total power of 35,9 thousand kW (Table 5.3.1). The size of the Cypriot fleet has decreased over the years 2008 to 2012, with the number of vessels decreasing by 47%, total GT 49% and total kW by almost 44% (fig. 5.3.1)

Table 5.3.1 Cyprus national fishing fleet key indicators: 2008-2012

	2008	2009	2010	2011	2012	% change
<b>Capacity</b>						
Number of vessels	1618	1768	1132	1105	858	-47.0
Gross Tonnage (GT, thousand)	6.8	6.8	4.7	4.6	3.5	-48.8
Power (kW, thousand)	63.6	69.0	45.5	46.1	35.9	-43.5
<b>Effort</b>						
Days at sea (thousand)	94.3	81.3	75.6			-19.8
Fishing days (thousand)	94.3	81.3	75.6			-19.8
Energy consumption (Million litres)	3.4	4.3	3.2			-5.9
<b>Employment</b>						
Total Employed	992	937	1421			43.2
FTE	828	1086	910.9			10.0
<b>Landings</b>						
Weight (thousand tonnes)	2.0	1.4	1.4			-30.4
Value (Million €)	13.2	8.8	10.2			-22.6

(Source: EU Member States DCF data submissions)

The total fishing enterprises in the Cypriot fleet in 2009 numbered 962. Almost all the enterprises owned a single fishing vessel, with only one enterprise owning two to five vessels. Total employment was estimated at 1,421 jobs and 910 FTEs in 2010. The data suggest that the level of employment has increased between 2008 and 2010, with the total number of employed increasing 43% and FTEs by 10% over the time period (Table 5.3.1; fig. 5.3.1).

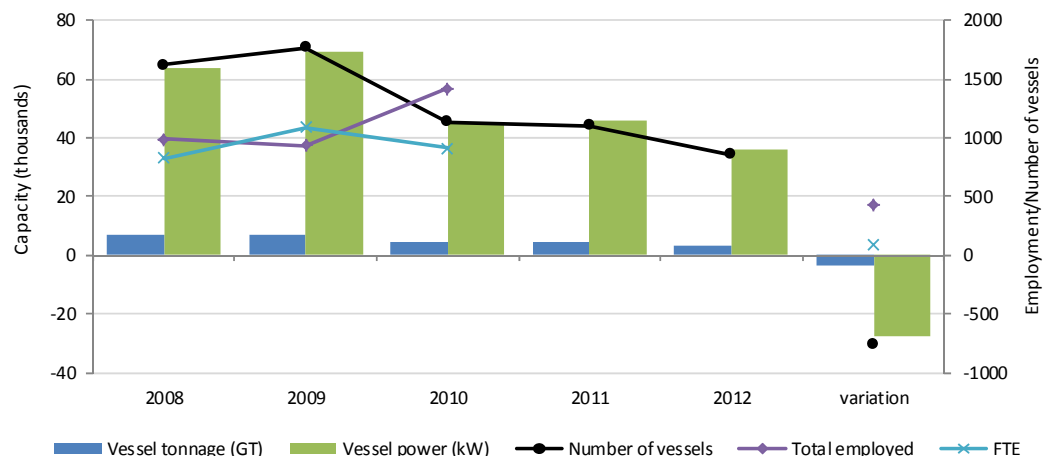


Figure 5.3.1 Cyprus national fleet capacity and employment trends: 2008-2012  
(Source: EU Member States DCF data submissions)

### 5.3.2 National fleet fishing activity and output

In 2010 the Cypriot fishing fleet spent a total of around 75,6 thousand days at sea (Table 5.3.1). The total number of sea days has been decreasing annually from 2008 onwards, and in 2010 this value was around 20% lower than in 2008. A reported 3,2 million litres of fuel was consumed by the national fleet in 2010, around 6% less than in 2009 (fig. 5.3.2, left).

The total volume of landings achieved by the Cypriot fleet in 2010 was around 1,4 thousand tonnes of seafood, a fall of around 30% compared to 2008. The total value of seafood landed by the Cypriot fleet in 2010 was €10,2 million, an decrease of around 23% compared to 2008 results (fig. 5.3.2, right).

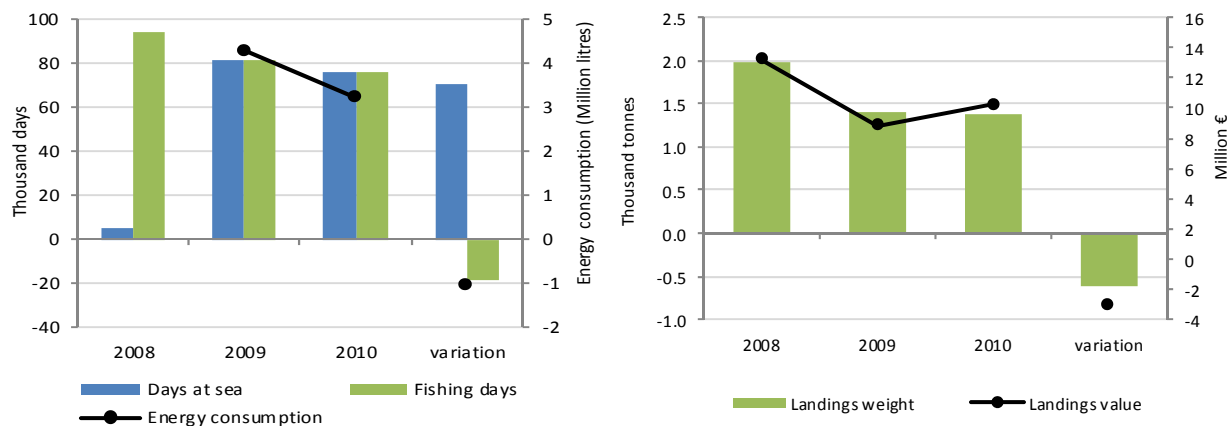


Figure 5.3.2 Cyprus national fleet fishing effort (left) and landings trends (right): 2008-2011  
(Source: EU Member States DCF data submissions)

In 2010, bogue obtained the highest landed value (€1,66 million), followed by surmullet (€1,64 million) and parrotfish (€0,74 million) (fig. 5.3.3). In terms of volume, in 2010 bogue was also the most common species landed in terms of weight (260 tonnes), followed by albacore (210 tonnes) and picarels (180 tonnes) (fig. 5.3.3).

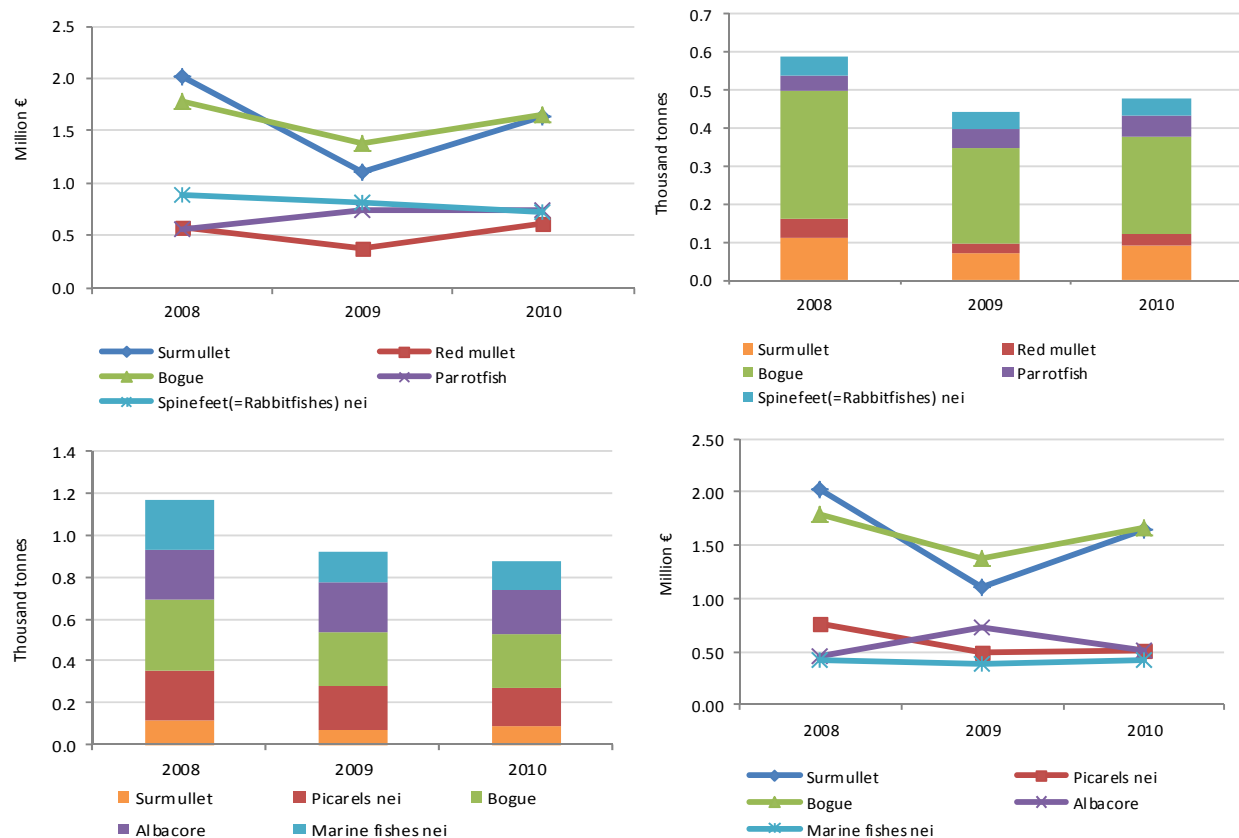


Figure 5.3.3 Cyprus national fleet total landings by key species in value (top) and weight (bottom), with corresponding weights and values: 2008-2011  
(Source: EU Member States DCF data submissions)

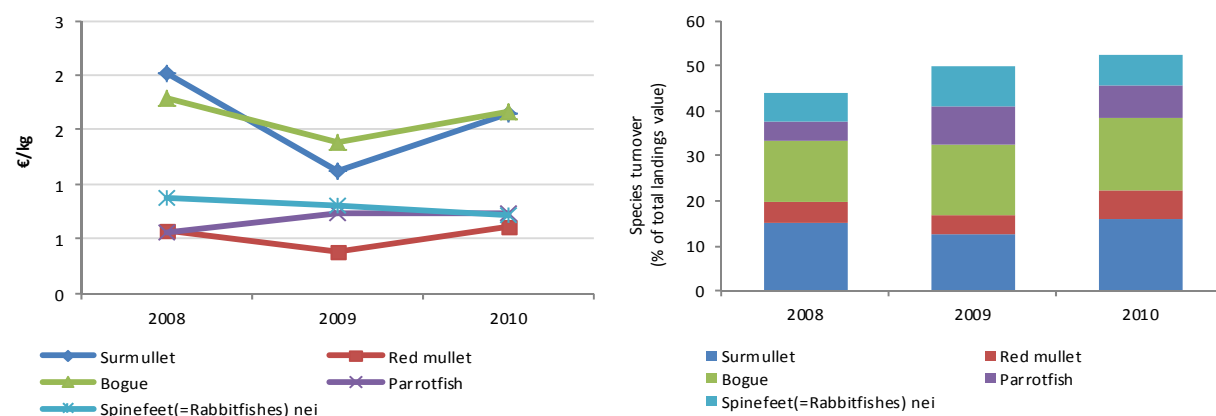


Figure 5.3.4 Total average price (left) and turnover as a percentage of total value of landings (right) for the five key species landed by the Cyprus national fleet: 2008-2010  
(Source: EU Member States DCF data submissions)

The average first-sale price of the key value species landed by the Cypriot fleet registered an overall decrease in 2009, apart from parrotfish. In general, the average landed price for these species recovered in 2010 but still not to 2008 prices. Bogue and surmullet attained the highest average prices, around

€1.66 per kilo in 2010, followed by parrotfish and spinefeet, both at an average €0.7 per kilo. Accordingly, these species also contributed the most to the fleet's total landings value, with bogue and surmullet representing 16% and parrotfish and spinefeet each 7% of the total turnover by the Cypriot fleet in 2010 (fig. 5.3.4).

### 5.3.3 National fleet economic performance

The total amount of income generated by the Cypriot national fleet in 2010 was €12,2 million. This consisted of €10,2 million from landings and almost €2 million in direct subsidies (Table 5.3.2). The total income of the Cypriot fleet increased 28% between 2009 and 2010. Total operating costs amounted to €17,3 million in 2010, or 142% of total income. The largest expenditure items were variable costs (€10,6 million) and fuel costs (€2,9 million) In 2010 the total operating costs of the Cypriot fleet decreased 10% from 2009 essentially due to a significant reduction in non-variable costs (Table 5.3.2).

Table 5.3.2 Cyprus national fishing fleet economic performance indicators: 2008-2011.

Some values are also presented as a percentage of total income (shaded grey columns). No forecast figures for 2011 were possible

	2008	As % of total income	2009	As % of total income	2010	As % of total income	2011	As % of total income	% change (2010-08)
<b>Income (Million €)</b>									
Landings income	13.20	95.8%	9.06	94.8%	10.21	83.7%	n/a	n/a	-22.7%
Direct subsidies	0.59	4.2%	0.50	5.2%	1.98	16.3%	n/a	n/a	238.4%
Other income	0	0%	0	0%	0	0%	n/a	n/a	
Fishing rights income	0	0%	0	0%	0	0%	n/a	n/a	
<b>Total Income</b>	<b>13.79</b>	<b>100%</b>	<b>9.55</b>	<b>100%</b>	<b>12.19</b>	<b>100%</b>	<b>n/a</b>	<b>n/a</b>	<b>-11.6%</b>
<b>Expenditure (Million €)</b>									
Crew wages	0.92	6.7%	0.83	8.6%	0.72	5.9%	n/a	n/a	-21.5%
Unpaid labour	0.39	2.8%	0.42	4.4%	0.83	6.8%	n/a	n/a	112.5%
Energy costs	2.39	17.4%	2.23	23.3%	2.90	23.8%	n/a	n/a	21.1%
Repair costs	0.80	5.8%	0.89	9.4%	1.95	16.0%	n/a	n/a	145.1%
Variable costs	6.65	48.2%	7.56	79.2%	10.58	86.8%	n/a	n/a	59.2%
Non-variable costs	0.20	1.5%	7.27	76.1%	0.36	2.9%	n/a	n/a	78.7%
Rights costs	0	0%	0	0%	0.0	0%	n/a	n/a	
<b>Total operating costs</b>	<b>11.34</b>	<b>82.3%</b>	<b>19.20</b>	<b>201.0%</b>	<b>17.33</b>	<b>142.2%</b>	<b>n/a</b>	<b>n/a</b>	<b>52.8%</b>
Depreciation costs	4.25	30.8%	3.88	40.6%	3.86	31.6%	n/a	n/a	-9.3%
Opportunity costs of capital	0.55	4.0%	16.51	172.8%	8.54	70%	n/a	n/a	1446.3%
<b>Performance Indicators (Million €)</b>									
Gross value added (GVA)	3.17	23.0%	-8.90	-93.2%	-5.57	-45.7%	n/a	n/a	-276.0%
Gross profit	1.86	13.5%	-10.15	-106.2%	-7.12	-58.4%	n/a	n/a	-483.2%
Net profit (incl. subsidies)	-2.36	-17.1%	-30.04	-314.4%	-17.54	-143.9%	n/a	n/a	-643.4%
Net profit (excl. subsidies)	-2.94	-21.4%	-30.54	-319.6%	-19.52	-160.1%	n/a	n/a	-562.8%
<b>Capital value (Million €)</b>									
Fleet depreciated replacement value	288.2		376.0		438.0				52.0%
Investments	0.94	6.8%	0.20	2.0%	1.29	10.6%			37.7%
Financial position (%)	0.30		0.30		0.30				0.0%

(Source: EU Member States DCF data submissions)

In terms of profitability, the Cypriot national fleet in 2010 generated a negative GVA of €5,6 million, a gross loss of €7,1 million and net loss (excluding subsidies) of €19,2 million (Table 5.3.2, fig. 5.3.5). The data suggests that the profitability of the Cypriot fleet has significantly deteriorated in recent years. The Cypriot fleet had an estimated depreciated replacement value of €416 million with €1,3 million of investments in 2010. Projections for the fleet's performance in 2011 were not possible due to limited data (no data on landings value or income for 2011 were reported).

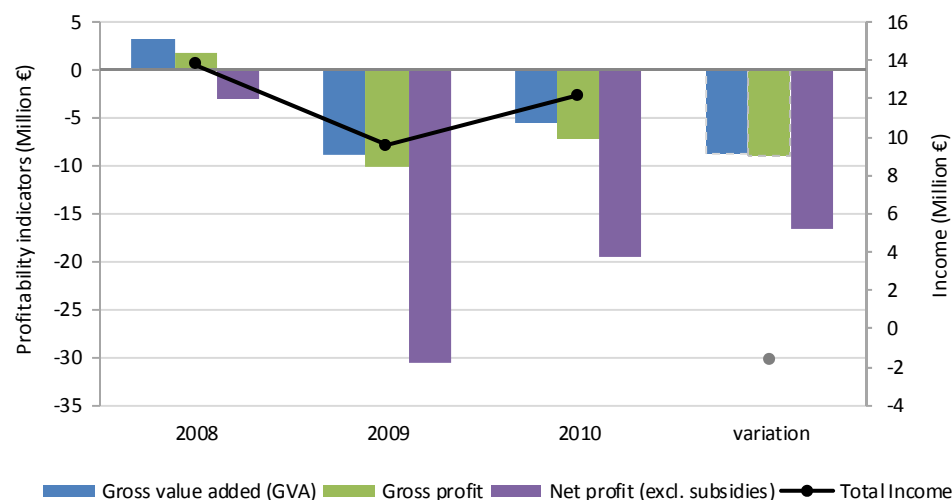


Figure 5.3.5 Cyprus national fishing fleet economic performance trends: 2008-2010  
(Source: EU Member States DCF data submissions)

### 5.3.4 Fleet composition

The Cypriot national fleet consisted of eight fleet segments in 2010, targeting different species predominantly in the Mediterranean Sea. Table 5.3.3 provides a breakdown of the key performance indicators for all Cypriot fleet segments in 2010. A short description of the two most important segments in terms of total value of landings is provided below.

**Passive gears 6-12m** – 455 vessels make up this segment and are based in the Mediterranean Sea. These vessels target species such as bogue, surmullet and parrotfish. The total value of landings was around €7 million and around 640 FTEs were employed in this fleet segment in 2010. The fleet segment made losses in 2010, with a negative GVA of €8,5 million and a net loss of €11,8 million (Table 5.3.3; fig. 5.3.6).

**PGP VL1224** – 20 vessels based in the Mediterranean Sea make up this segment and target species such as sargo breams, albacore and swordfish. The total value of landings was around €0.9 million and around 84 FTEs were employed in the fleet segment in 2010. This segment made losses in 2010, generating a negative GVA of €1,2 million and a net loss of €2,8 million (Table 5.3.3; fig. 5.3.7).

Table 5.3.3 Cyprus national fishing fleet composition and key indicators at fleet segment level for 2010

Fleet Segment	Number of vessels	Vessel tonnage (GT)	Vessel power (kW)	Total employed	FTE (national)	Days at sea	Energy consumption (kilolitres)	Landings weight (tonnes)	Landings value (thousand €)	Direct Subsidies (thousand €)	GVA (thousand €)	Gross profit (thousand €)	Net profit (excl. subsidies) (thousand €)	Net Profit (incl. subsidies) (thousand €)	Cluster
<b>DTS</b>	<b>11</b>	<b>1172</b>	<b>3732.37</b>	<b>49</b>	<b>49</b>	<b>1235</b>	<b>1021</b>	<b>276</b>	<b>2274</b>	<b>63</b>	<b>-852</b>	<b>-1164</b>	<b>-3482</b>	<b>-3420</b>	
VL1824				49	49	200	1021	276	2274	63	-852	-1164	-3482	-3420	CLUSTER2
VL2440						1035									CLUSTER2
VL1840	11	1172	3732.37												CLUSTER2
<b>PG</b>	<b>500</b>	<b>1628.8</b>	<b>22230.9</b>	<b>901</b>	<b>701</b>	<b>65570</b>	<b>1589</b>	<b>854</b>	<b>7027</b>	<b>1869</b>	<b>-9052</b>	<b>-9818</b>	<b>-12777</b>	<b>-12777</b>	
VL0006	45	48.6	1386.61	81	63	4786	114				-527	-596	-675	-675	
VL0612	455	1580.2	20844.3	820	638	60784	1475	854	7027		-8525	-9222	-12102	-12102	
VL0012										1869					
<b>PGO</b>	<b>382</b>	<b>591</b>	<b>10887</b>	<b>387</b>	<b>77.4</b>	<b>7348.3</b>					<b>-1526</b>	<b>-1589</b>	<b>-1589</b>	<b>-1589</b>	
VL0006	293	292	7637	299	59.8	5618.2					-984	-1033	-1033	-1033	
VL0612	89	299	3250	88	17.6	1730.2					-541	-556	-556	-556	
<b>PGP</b>	<b>20</b>	<b>752.1</b>	<b>3553.2</b>	<b>84</b>	<b>84</b>	<b>1453</b>	<b>331</b>	<b>250</b>	<b>907</b>	<b>49</b>	<b>-1171</b>	<b>-1579</b>	<b>-2848</b>	<b>-2799</b>	
VL1218				84	84	1246		250	907	49	-1171	-1579	-2848	-2799	CLUSTER1
VL1824						207									CLUSTER1
VL1224	20	752.1	3553.2				331								CLUSTER1
Cluster Name		Clustered fleet segments													
CLUSTER1		PGP VL1218		PGP VL1824											
CLUSTER2		DTS VL1824		DTS VL2440											

(Source: EU Member States DCF data submissions)



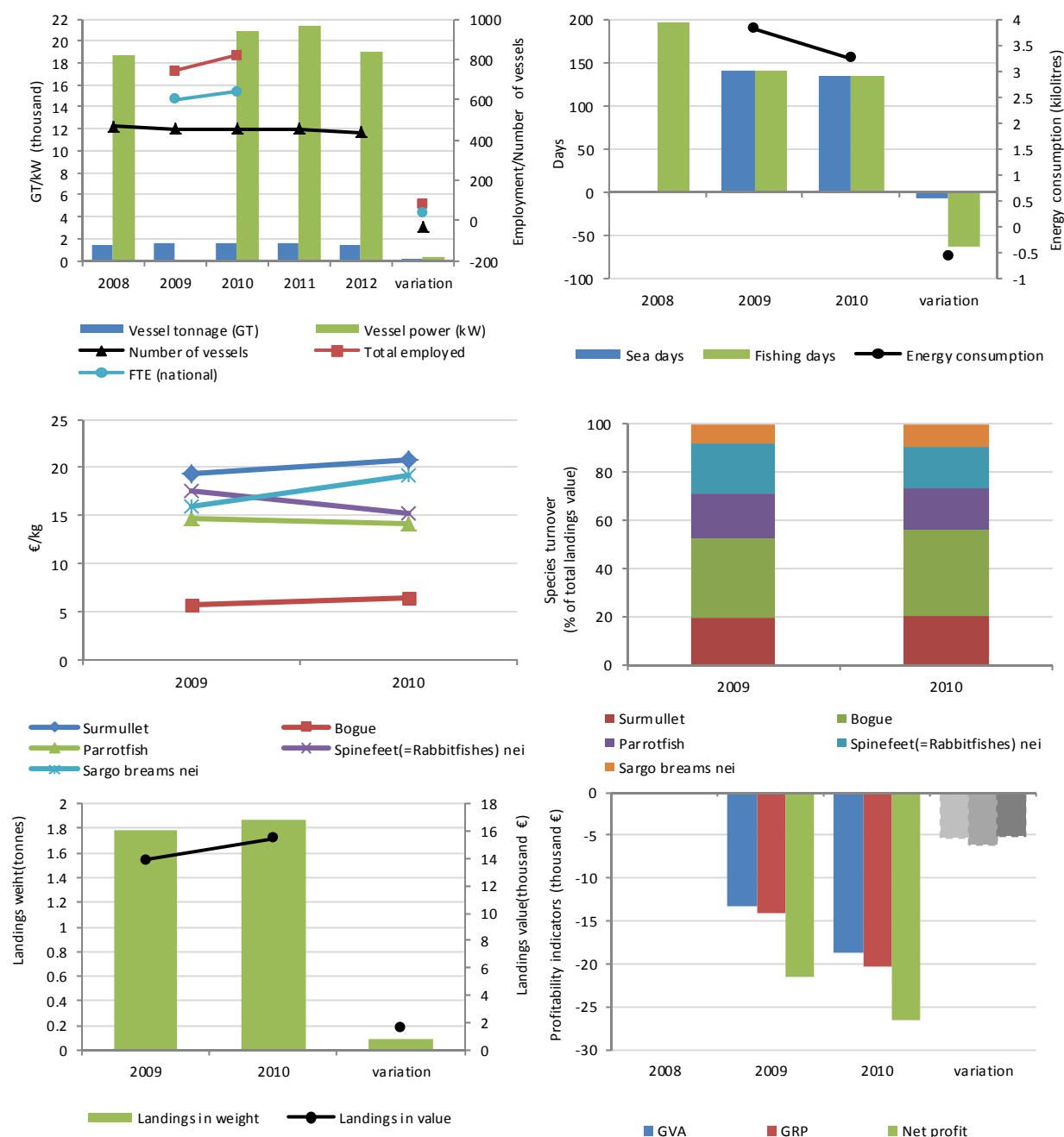


Figure 5.3.6 Key indicators for the average vessel in the Cyprus PG VL0612 fleet segment, 2008-2010:

top left – fleet segment capacity and employment; top right – average fishing activity and effort; middle left – average prices (€/kg) for key species; middle right - turnover as a percentage of total value of landings for key species; bottom left – average landings in value and weight; bottom right – main economic performance indicators for the average vessel (variation 2010-2008)

(Source: EU Member States DCF data submissions)

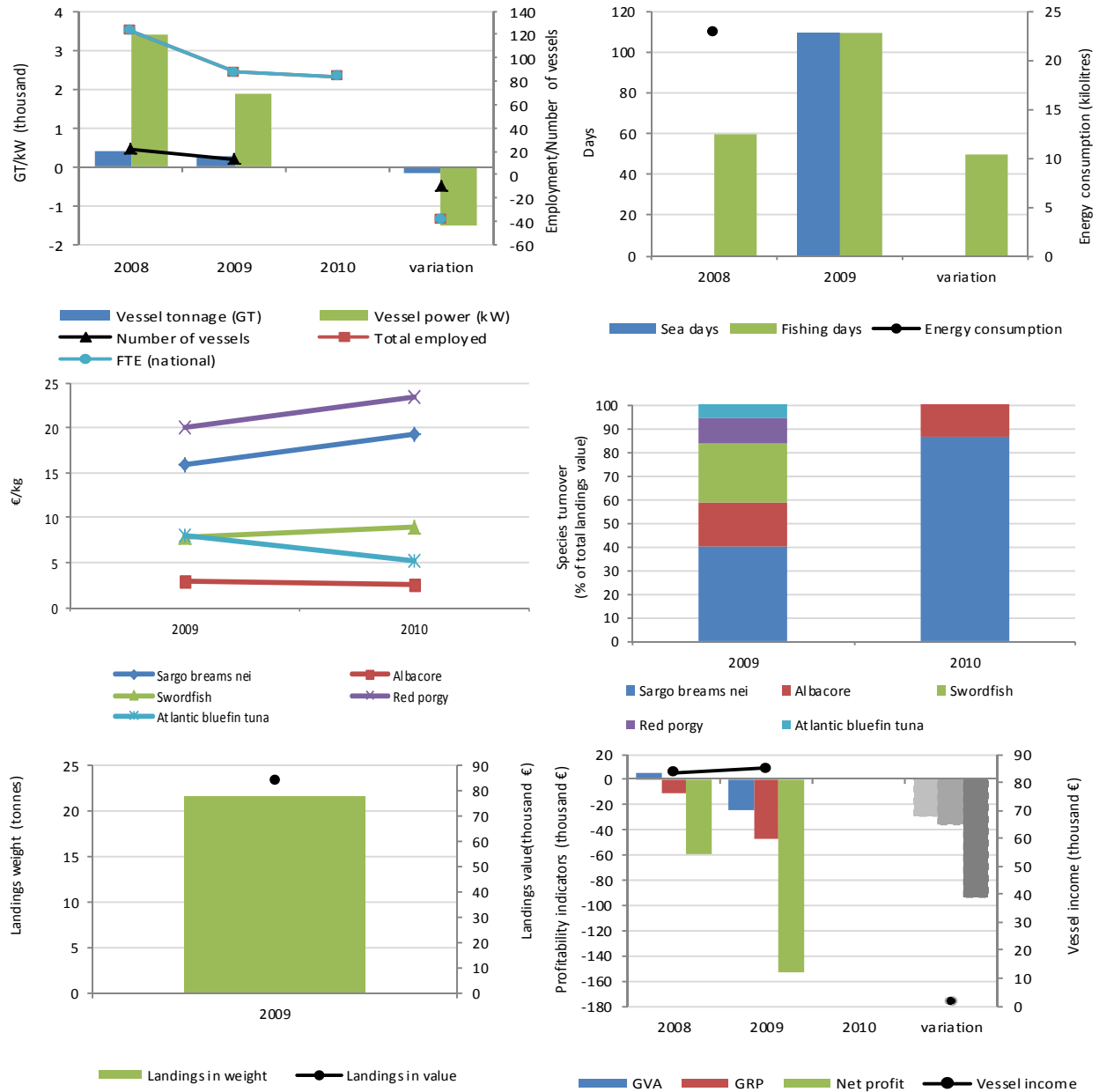


Figure 5.3.7 Key indicators for the average vessel in the Cyprus PGP VL1218 fleet segment, 2008-2010: top left – fleet segment capacity and employment; top right – average fishing activity and effort; middle left – average prices (€/kg) for key species; middle right - turnover as a percentage of total value of landings for key species; bottom left – average landings in value and weight: bottom right – main economic performance indicators for the average vessel (variation 2010-2008)

(Source: EU Member States DCF data submissions)

### 5.3.5 Assessment for 2011 and 2012

No data available.

### **5.3.6 Data issues**

Significant amounts of missing data sets. No forecast projections for 2010 were possible.



## 5.4 DENMARK

### 5.4.1 National fleet structure

In 2011 the Danish fishing fleet consisted of 2,682 registered vessels, with a gross tonnage of 68 thousand tonnes, total power of 247,4 thousand kW and an average vessel age of 29 years (Table 5.4.1). The size of the Danish fleet followed a decreasing trend between 2008 and 2010. In this period, the number of vessels declined by around 5% while total GT and kW of the fleet declined by 14% and 13%, respectively, during the same period (fig. 5.4.1).

Table 5.4.1 Denmark national fishing fleet key indicators: 2008-2012

	2008	2009	2010	2011	2012	% change
<b>Capacity</b>						
Number of vessels	2813	2786	2682	n/a	n/a	-4.7
Average vessel age	29	29	29	n/a	n/a	2.3
Gross Tonnage (GT, thousand)	78.8	74.4	68.0	n/a	n/a	-13.7
Power (kW, thousand)	282.9	269.2	247.4	n/a	n/a	-12.5
<b>Effort</b>						
Days at sea (thousand)	123.7	122.0	113.9	114.1		-7.7
Fishing days (thousand)	123.3	121.5	113.5	113.7		-7.8
Energy consumption (Million litres)	94.1	94.5	94.6			0.5
<b>Employment</b>						
Total Employed	1801	1694	1531			-15.0
FTE	2061	1854	1807			-12.3
<b>Landings</b>						
Weight (thousand tonnes)	687.1	758.0	782.4	703.1		2.3
Value (Million €)	334.1	283.7	378.3	410.6		22.9

(Source: EU Member States DCF data submissions)

The total number of fishing enterprises in the Danish fleet was 1574 in 2010. The vast majority of fishing enterprises, 96%, owned a single vessel and 4% of enterprises owned two to five fishing vessels. Only 1 fishing enterprise owned six or more active fishing vessels. Total employment was estimated at around 1,531 people and 1,807 FTEs in 2010. The level of employment decreased between 2008 and 2010. The total number employed decreased by 15% while the number of FTEs decreased by 12% over the time period (Table 5.4.1; fig. 5.4.1).

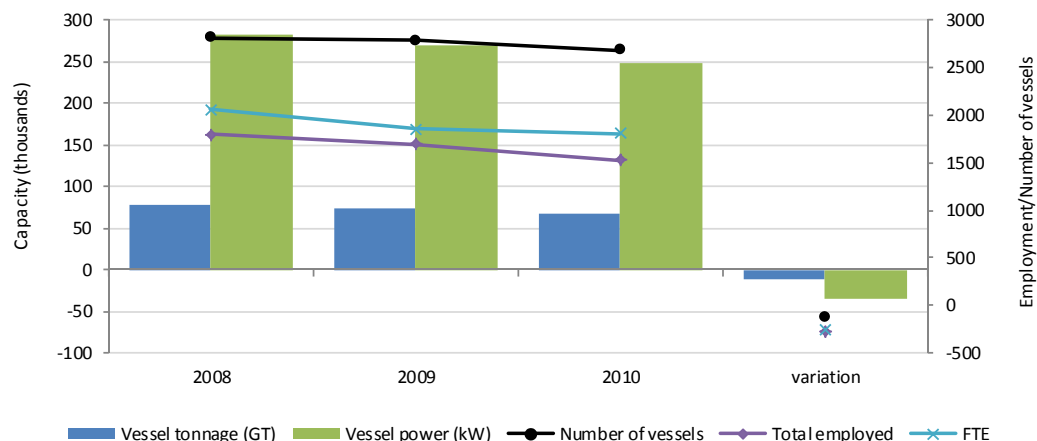


Figure 5.4.1 Denmark national fleet capacity and employment trends: 2008-2012  
(Source: EU Member States DCF data submissions)

### 5.4.2 National fleet fishing activity and output

In 2011 the Danish fishing fleet spent a total of around 114 thousand days at sea (Table 5.4.1). The total number of days at sea in 2011 was around 8% lower than in 2008, although there was a slight increase from 2010. The total quantity of fuel consumed in 2010 was 95 million litres, a 0.5% increase on 2008 figures (fig. 5.4.2, left).

The total volume of landings achieved by the Danish fleet in 2011 was around 703 thousand tonnes of seafood, a decrease of around 80 thousand tonnes compared to 2010. Conversely, the total value of seafood landed by the Danish fleet increased by around 9% compared to 2010 results, totally €410 million in 2011.

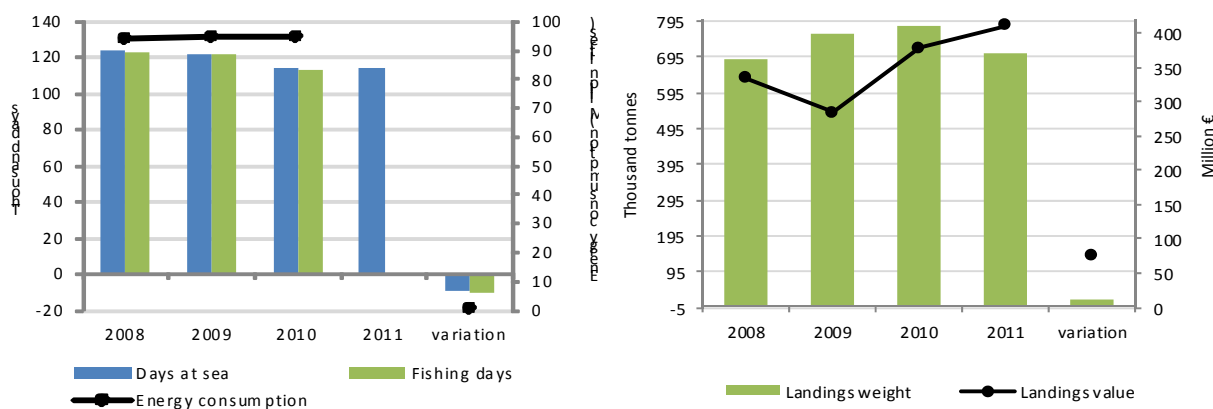


Figure 5.4.2 Denmark national fleet fishing effort (left) and landings trends (right): 2008-2011  
(Source: EU Member States DCF data submissions)

The top five species in terms of value landed by the Danish fleet in 2010 were the same as the top five species in terms of weight. In 2011 sandeel was the most common species landed in terms of volume (279 thousand tonnes), followed by sprat (152 thousand tonnes) and herring (97 thousand tonnes). In

2011 sandeel also achieved the highest value of landings (€60 million) by the national fleet, followed by mackerel (€57 million) and herring (€52 million) (fig. 5.4.3).

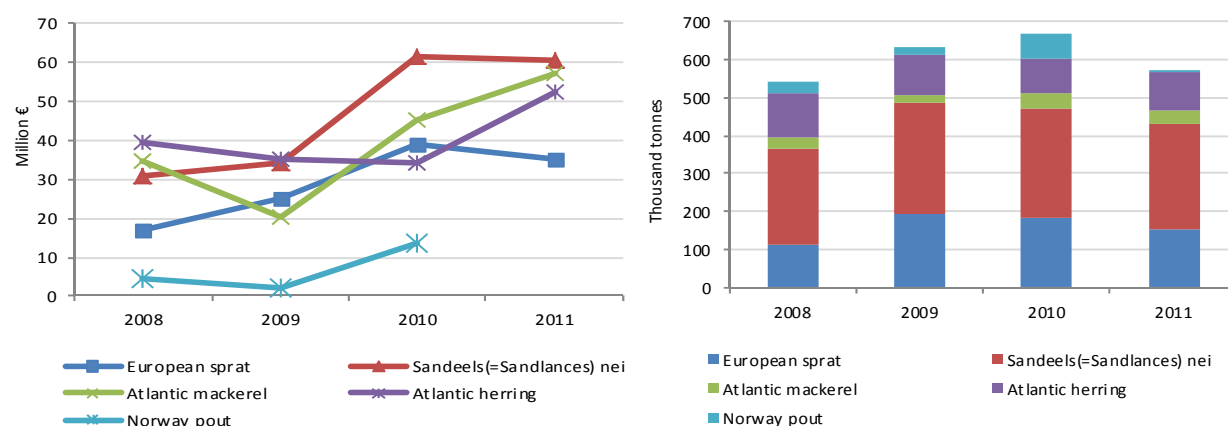


Figure 5.4.3 Denmark national fleet total landings by key species in value (left) and weight (right): 2008-2011  
(Source: EU Member States DCF data submissions)

Atlantic cod, at €1.9 per kilo in 2011, obtained the highest average first-sale price over the period analysed, closely followed by Atlantic mackerel, which in 2011 averaged €1.6 per kilo. In terms of turnover, sandeels contributed 16.3% to the total landings value in 2010 and almost 15% in 2011, followed by Atlantic mackerel (14%), herring (12.7%) and cod (12%) in 2011.

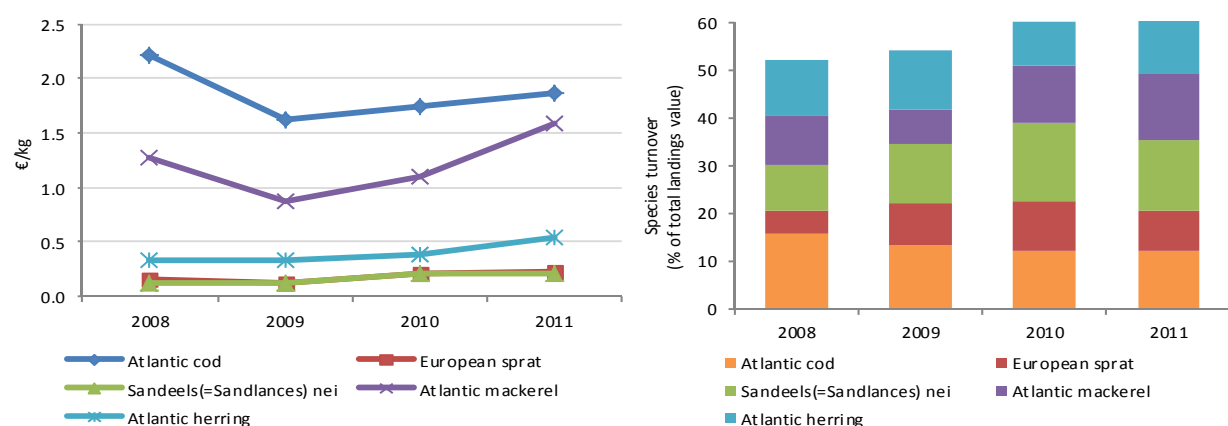


Figure 5.4.4 Total average price (left) and turnover as a percentage of total value of landings (right) for the five key species landed by the Denmark national fleet: 2008-2011  
(Source: EU Member States DCF data submissions)

### 5.4.3 National fleet economic performance

The total amount of income generated by the Danish national fleet in 2010 was €405 million. This consisted of €387 million from landings, €17 million in other income and €70 thousand in direct income subsidies (Table 5.4.2). The total income of the Danish fleet increased 38% between 2009 and 2010. Total operating costs of the Danish national fleet in 2010 were €190 million, amounting to 47% of total income. The largest expenditure items were crew wages (€79 million) and fuel costs (€45 million) (Table

5.4.2). In 2010, total operating costs were 2.3% lower than in 2008, however they were 14% higher than in 2009.

In terms of profitability, the total amount of GVA, gross profit and net profit (excluding subsidies) generated by the Danish national fleet in 2010 was €267 million, €176 million and €58 million, respectively (Table 5.4.2, fig. 5.4.5). These results appear to buck a trend of indicated net profit losses generated by the fleet in 2008 and 2009. In 2010, the Danish fleet had an estimated depreciated replacement value of €442 million and an estimated value of fishing rights of €740 million.

Table 5.4.2 Denmark national fishing fleet economic performance indicators: 2008-2011.

Forecast figures for 2011 are highlighted in blue and values are also presented as a percentage of total income (shaded grey columns)

	2008	As % of total income	2009	As % of total income	2010	As % of total income	2011	As % of total income	% change (2010-08)
<b>Income (Million €)</b>									
Landings income	330.1	96.1%	281.9	96.3%	387.2	95.7%	410.6	96.7%	17.3%
Direct subsidies	0.2	0.1%	0	0%	0.1	0.02%	0.1	0.01%	-63.7%
Other income	13.3	3.9%	10.8	3.7%	17.4	4.3%	14.1	3.3%	30.7%
<b>Total Income</b>	<b>343.6</b>	<b>100%</b>	<b>292.7</b>	<b>100%</b>	<b>404.7</b>	<b>100%</b>	<b>424.7</b>	<b>100%</b>	<b>17.8%</b>
<b>Expenditure (Million €)</b>									
Crew wages	77.3	22.5%	67.6	23.1%	79.0	19.5%	91.0	21.4%	2.3%
Unpaid labour	44.3	12.9%	39.6	13.5%	40.6	10.0%	49.8	11.7%	-8.3%
Energy costs	51.8	15.1%	33.9	11.6%	45.1	11.1%	54.1	12.7%	-12.9%
Repair costs	37.1	10.8%	35.7	12.2%	39.1	9.7%	39.2	9.2%	5.4%
Variable costs	32.3	9.4%	29.9	10.2%	32.0	7.9%	32.1	7.6%	-0.9%
Non-variable costs	21.7	6.3%	20.6	7.0%	21.4	5.3%	n/a		-1.7%
Rights costs	7.1	2.1%	6.6	2.2%	11.5	2.9%	9.1	2.1%	63.3%
<b>Total operating costs</b>	<b>271.5</b>	<b>79.0%</b>	<b>233.9</b>	<b>79.9%</b>	<b>268.8</b>	<b>66.4%</b>	<b>n/a</b>		<b>-1.0%</b>
Depreciation costs	88.7	25.8%	82.7	28.2%	85.5	21.1%	84.1	19.8%	-3.7%
Opportunity costs of capital	2.9	0.8%	10.4	3.6%	3.2	0.8%	5.5	1.3%	9.4%
<b>Performance Indicators (Million €)</b>									
Gross value added (GVA)	200.5	58.3%	172.6	59.0%	267.0	66.0%	n/a		33.2%
Gross Profit	78.9	23.0%	65.3	22.3%	147.4	36.4%	n/a		86.8%
Net profit (incl. subsidies)	-12.5	-3.6%	-27.7	-9.4%	58.8	14.5%	n/a		571.1%
Net profit (excl. subsidies)	-12.7	-3.7%	-27.7	-9.5%	58.8	14.5%	n/a		563.4%
<b>Capital value (Million €)</b>									
Fishing rights	348.2	101.3%	846.3	289.1%	739.8	182.8%			112.5%
Investments	57.8	16.8%	69.9	23.9%	23.2	5.7%			-59.9%
Depreciated replacement value	433.3	126.1%	422.1	144.2%	441.9	109.2%	432.0	101.7%	2.0%
Financial position (%)	59.8		57.4		71.1				

(Source: EU Member States DCF data submissions)



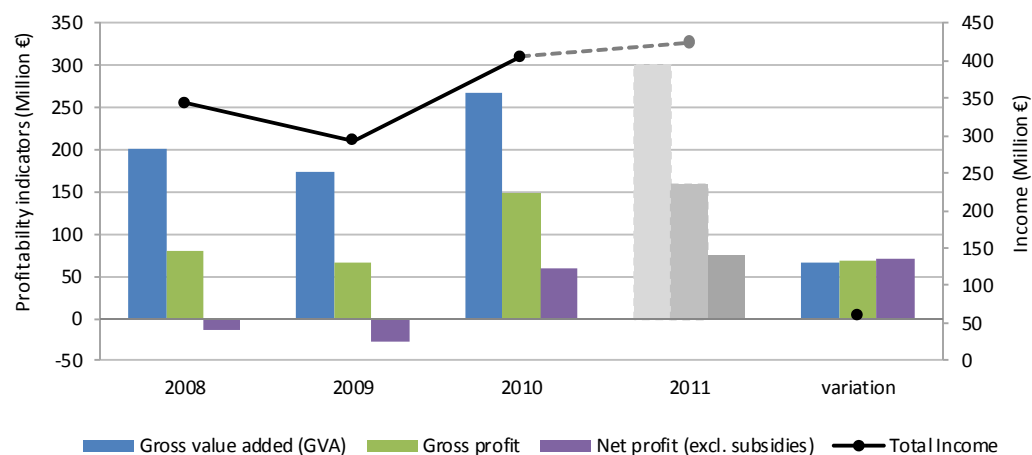


Figure 5.4.5 Denmark national fishing fleet economic performance trends: 2008-2011  
(Source: EU Member States DCF data submissions)

#### 5.4.4 Fleet composition

The Danish national fleet consisted of 18 fleet segments in 2010. The fleet is highly diversified with a broad range of vessel types targeting different species predominantly in the North Sea, Baltic Sea and North Atlantic. Table 5.5.3 provides a breakdown of key performance indicators for all Danish fleet segments in 2010. A short description of the five most important segments in terms of total value of landings is provided below.

**Beam trawl 12-18m (TBB: VL1218)** – 11 vessels make up this segment and are based predominantly in the Baltic Sea. These vessels target demersal species such as common shrimp, plaice and cod. The total value of landings was around €31 million and around 20 FTEs were employed in this fleet segment in 2010. This fleet segment was profitable in 2010, with a GVA of €13 million and a net profit of over €220 thousand. The average vessel income was estimated at €217 thousand, generating a gross profit of €20 thousand and net loss of €24 thousand in 2010 (fig. 5.4.6).

**Demersal trawl / seine 12-18m (DTS: VL1218)** – 168 vessels make up this segment and are based predominantly in the North and Baltic Seas. These vessels target demersal species such as cod, haddock and saithe. The total value of landings was around €43 million and around 313 FTEs were employed in this fleet segment in 2010. This fleet segment was profitable in 2010, with a GVA of €27 million and a net profit of over €1 million. The average vessel in this fleet segment achieved an income of €274 thousand in 2010, generating a gross profit of €56 thousand and net profit of € 6.3 thousand (fig. 5.4.7).

**Demersal trawl / seine 18-24m (DTS: VL1824)** – 68 vessels make up this segment and are based predominantly in the North Sea and Skagerrak. These vessels target demersal species such as cod, Norway lobster, plaice and sole. The total value of landings was around €44 million and around 274 FTEs were employed in this fleet segment in 2010. This fleet segment was profitable in 2010, with a GVA of €27 million and a net profit of around €0.9 million.

**Demersal trawl / seine 24-40m (DTS: VL2440)** – 42 vessels make up this segment and are based predominantly in the North Sea and Skagerrak. These vessels target demersal species such as cod, sandeel and saithe. The total value of landings was around €57 million and around 254 FTEs were employed in this fleet segment in 2010. This fleet segment was highly profitable in 2010, with a GVA of €36 million and a net profit of over €6 million.

**Demersal trawl / seine above 40m** (DTS: VL40XX) – 29 vessels make up this segment and are based predominantly in the North Sea and in the North Atlantic. These vessels target demersal species such as sandeel, mackerel, sprat and herring. The total value of landings was around €163 million and around 313 FTEs were employed in this fleet segment in 2010. This fleet segment was profitable in 2010, with a GVA of €133 million and a net profit of over €59 million.

**Vessels using polyvalent passive gears 12-18m** (PGP: VL1218) – 45 vessels make up this segment and are based predominantly in the North Sea and Skagerrak. These vessels target demersal species such as cod, sole and plaice. The total value of landings was around €14 million and around 89 FTEs were employed in this fleet segment in 2010. This fleet segment was stable in 2010, with a GVA of €7 million and a net profit of over €-0.1 million.

Table 5.4.3 Denmark national fishing fleet composition and key indicators at fleet segment level for 2010

Fleet Segment	Number of vessels	Vessel tonnage (GT)	Vessel power (kW)	Total employed	FTE (national)	Days at sea	Energy consumption (kilolitres)	Landings weight (tonnes)	Landings value (thousand €)	Direct Subsidies (thousand €)	GVA (thousand €)	Gross profit (thousand €)	Net profit (excl. subsidies) (thousand €)	Net Profit (incl. subsidies) (thousand €)
<b>DRB</b>	<b>54</b>	<b>1269.3</b>	<b>7321.16</b>	<b>74.2</b>	<b>35.87</b>	<b>2648</b>	<b>844</b>	<b>27177</b>	<b>5337</b>	<b>0</b>	<b>3007</b>	<b>1009</b>	<b>-1447</b>	<b>-1447</b>
VL1012	24	365.6	2717.67	36.76	17.36	1193	452	9894	2019		1340	466	-358	-358
VL1218	30	903.7	4603.49	37.44	18.51	1455	392	17283	3319		1667	543	-1090	-1090
<b>DTS</b>	<b>323</b>	<b>50584.57</b>	<b>138245</b>	<b>848.71</b>	<b>1159.4</b>	<b>49578</b>	<b>79356</b>	<b>719287</b>	<b>307285</b>	<b>70</b>	<b>224061</b>	<b>139276</b>	<b>67682</b>	<b>67751</b>
VL0010						400		54	126					
VL1012	16	176.5	1602.65	7.85	5.28	961	88	1219	891		168	-103	-161	-161
VL1218	168	5765.17	31069.7	310.7	313.42	21250	10668	57926	42544	70	27074	9485	1069	1138
VL1824	68	6798.2	21939.2	197.69	274.51	11836	12813	53968	44242		27464	11088	919	919
VL2440	42	11464.7	25379.2	153.21	253.7	8982	18744	99525	56830		36059	19291	6421	6421
VL40XX	29	26380	58254.5	179.26	312.51	6149.6	37042	506595	162653		133295	99515	59434	59434
<b>PGP</b>	<b>1029</b>	<b>4708.72</b>	<b>41803.6</b>	<b>369.56</b>	<b>333.35</b>	<b>49468</b>	<b>3545</b>	<b>17491</b>	<b>37950</b>	<b>0</b>	<b>18120</b>	<b>545</b>	<b>-5377</b>	<b>-5377</b>
VL0010	919	2646.92	29351.6	230.86	196.66	34199	1411	6004	13473		8393	-1931	-4274	-4274
VL1012	65	675.5	5907.54	55.7	47.23	7090	640	2492	4867		2289	-58	-984	-984
VL1218	45	1386.3	6544.48	83	89.46	6603	1494	6961	14314		7439	2534	-119	-119
VL1824						1576		2035	5296					
<b>PMP</b>	<b>205</b>	<b>4472.3</b>	<b>21866.4</b>	<b>178.74</b>	<b>202.71</b>	<b>14436</b>	<b>7569</b>	<b>14336</b>	<b>20027</b>	<b>0</b>	<b>17306</b>	<b>5894</b>	<b>-426</b>	<b>-426</b>
VL0010	109	567.7	6069.35	24.77	19.32	5210	537	1093	2592		1323	330	-319	-319
VL1012	29	348.9	2981.72	30.33	24.75	2864	749	1532	2004		1646	363	-624	-624
VL1218	51	1159	7185.1	74.95	78.44	4840	2814	8889	8214		6498	2160	-187	-187
VL1824	16	2396.7	5630.25	48.69	80.2	1522	3468	2822	7217		7838	3042	704	704
<b>TBB</b>	<b>28</b>	<b>1994.5</b>	<b>5810.45</b>	<b>59.69</b>	<b>75.26</b>	<b>4305</b>	<b>3320</b>	<b>4129</b>	<b>7712</b>	<b>0</b>	<b>4553</b>	<b>661</b>	<b>-1656</b>	<b>-1656</b>
VL1218	11	547.9	2121.18	16.67	20.37	1750	945	1345	3067		1323	223	-266	-266
VL1824	17	1446.6	3689.27	43.02	54.89	2555	2375	2784	4645		3230	438	-1389	-1389

(Source: EU Member States DCF data submissions)

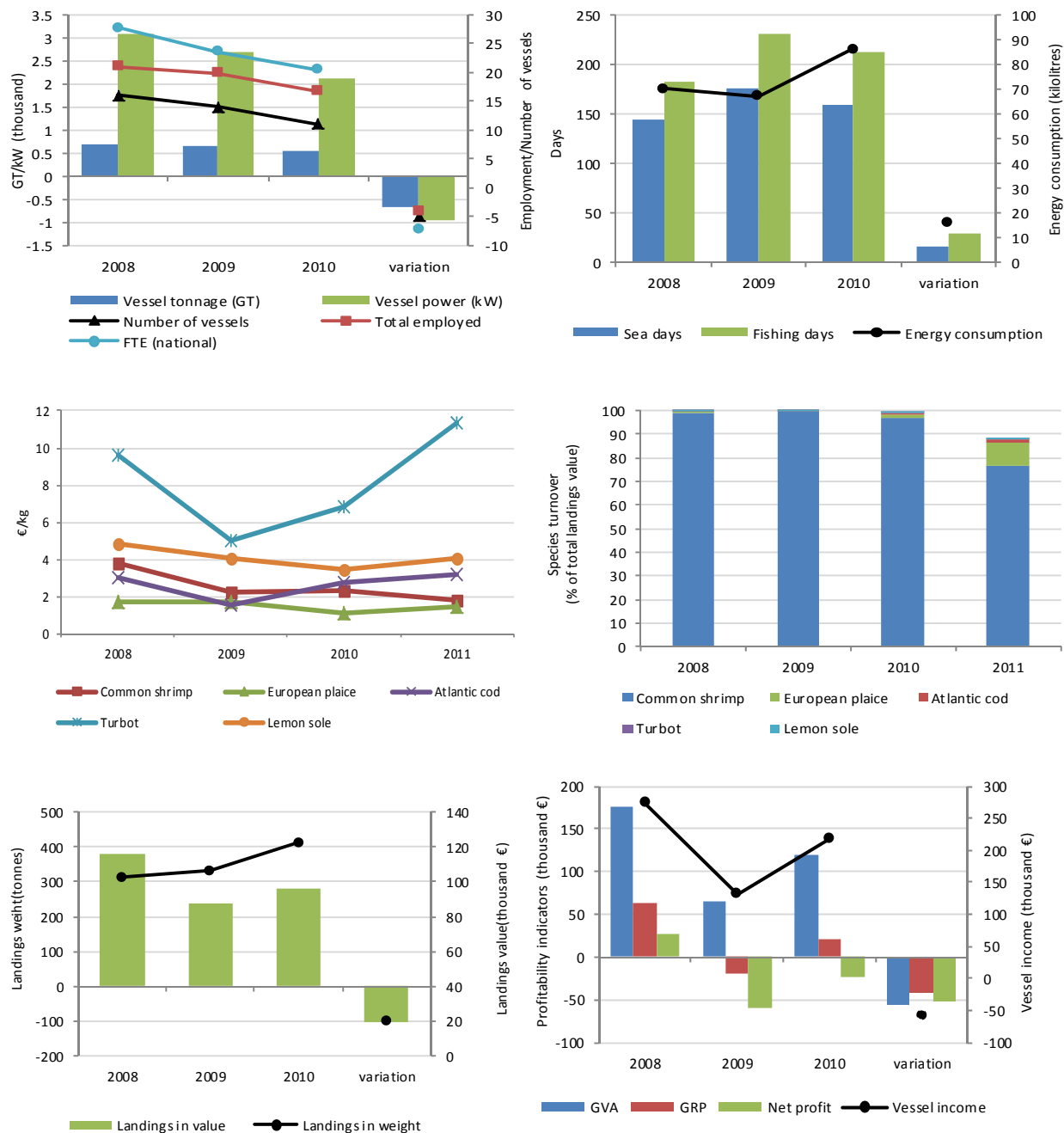


Figure 5.4.6 Key indicators for the average vessel in the Denmark TBB VL1218 fleet segment 2008-2011: top left – fleet segment capacity and employment; top right – average fishing activity and effort; middle left – average prices (€/kg) for key species; middle right - turnover as a percentage of total value of landings for key species; bottom left – average landings in value and weight; bottom right – main economic performance indicators for the average vessel (variation 2010-2008)

(Source: EU Member States DCF data submissions)

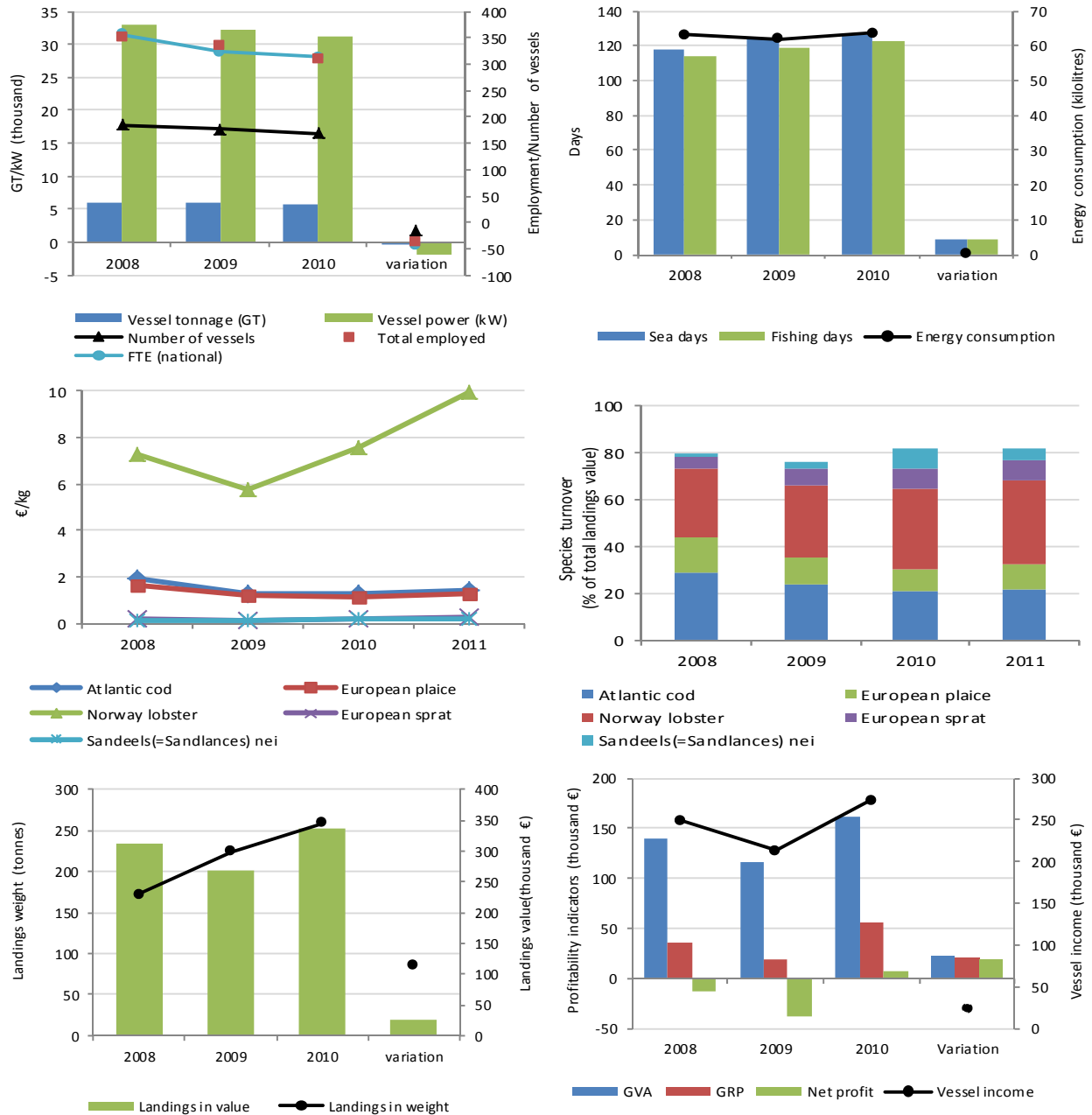


Figure 5.4.7 Key indicators for the average vessel in the Denmark DTS VL1218 fleet segment 2008-2011:

top left – fleet segment capacity and employment; top right – average fishing activity and effort; middle left – average prices (€/kg) for key species; middle right - turnover as a percentage of total value of landings for key species; bottom left – average landings in value and weight; bottom right – main economic performance indicators for the average vessel (variation 2010-2008)

(Source: EU Member States DCF data submissions)

#### **5.4.5 Assessment for 2011 and 2012**

Based on landings value for 2011, the Danish fishery had an increase in landings value compared to 2010. Higher prices on some of the most important species such as cod, mackerel, herring, sprat and Norway lobster in most cases outweighed the fall in total weight of landings. Combined with a continued restructuring of the fleet, this is expected to result in a better economic performance in 2011 compared to 2010.

Looking at the outlook for 2012, things do not look so positive. A very low TAC for sandeel will have a major impact on the economic performance of many vessels. Furthermore, the uncertain situation with the mackerel stock in the North Atlantic, and the on-going discussions with Iceland and the Faeroese Islands may also have an impact on the performance of the demersal trawl/seine above 40m. Negative developments are expected in price for most of the species caught by Danish fishermen. In summary, the economic performance in 2012 is expected to be worse than 2011.

#### **5.4.6 Data issues**

It was not possible to perform all economic performance projections for 2011. The data for the 2011 segmentation of the fleet is not finalised before the economic statistics are produced in October/November 2012.



## 5.5 ESTONIA

### 5.5.1 National fleet structure

In 2012 the Estonian fishing fleet consisted of 932 registered vessels, with a combined gross tonnage of 12.8 thousand GT, total power of almost 37 thousand kW and an average age of 20 years (Table 5.5.1). The size of the Estonian fishing fleet decreased between 2008 and 2012. The number of vessels decreased 3% (or 32 vessels) while the total GT and kW of the fleet declined by 35% and 27%, respectively during the same period (fig. 5.5.1). The main reason for changes in the structure of the national fleet is capacity reduction due to a decommissioning program aimed at achieving balance between the size of the fishing fleet and available fishing opportunities. The decrease mainly took place among trawlers. It is a reason why the decreased in total GT and kW of the national fleet is greater than the total number of vessels.

Table 5.5.1 Estonia national fishing fleet key indicators: 2008-2012

	2008	2009	2010	2011	2012	% change
<b>Capacity</b>						
Number of vessels	964	963	947	934	932	-3.3
Average vessel age	19	20	21	22	20	5.3
Gross Tonnage (GT, thousand)	19.8	17.8	17.3	14.7	12.8	-35.5
Power (kW, thousand)	50.3	45.9	44.4	39.6	36.8	-26.8
<b>Effort</b>						
Days at sea (thousand)	n/a	n/a	n/a	n/a		
Fishing days (thousand)	n/a	n/a	n/a	n/a		
Energy consumption (Million litres)	5.4	5.0	4.3			-20.6
<b>Employment</b>						
Total Employed	3002	1895	1948			-35.1
FTE	n/a	n/a	521			
<b>Landings</b>						
Weight (thousand tonnes)	83.5	83.5	81.3	63.3		-24.2
Value (Million €)	15.6	14.4	13.1	13.8		-11.7

(Source: EU Member States DCF data submissions)

The total number of fishing enterprises in the Estonian fleet was 659 in 2011. The vast majority of fishing enterprises, 70%, owned a single vessel and 30% of enterprises owned two to five fishing vessels. Only 3 fishing enterprises owned six or more fishing vessels.

Total employment was around 1948 jobs and 521 FTEs in the Estonian fleet in 2010. The level of employment decreased between 2008 and 2010, with the total number employed decreasing by 35% over the time period (Table 5.5.1; fig. 5.5.1). There was a significant drop in the total number employed between 2008 and 2009. The decline occurred mainly in the small scale coastal sector, due to the fact that it became compulsory for all fishermen dealing with commercial fishing to hold a professional certificate.

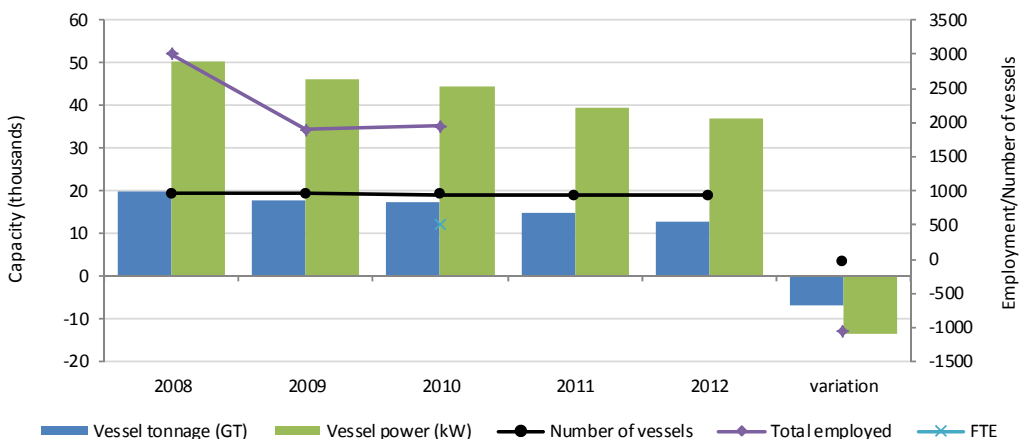


Figure 5.5.1 Estonia national fleet capacity and employment trends: 2008-2012  
(Source: EU Member States DCF data submissions)

### 5.5.2 National fleet fishing activity and output

The total quantity of fuel consumed in 2010 was 4.3 million litres, a decrease of around 21% between 2008 and 2010 (fig. 5.5.2, left). The total volume of landings achieved by the Estonian fleet in 2011 was 63.3 thousand tonnes of seafood. The total volume of landings has declined between 2008 and 2011 (fig. 5.5.2, right). The decrease in the number of trawlers also affected decrease in the total energy consumption between 2008 and 2010. The decrease of quotas for the internationally TAC-regulated species (European sprat and Atlantic herring) was the main reason for declines in total landings weight.

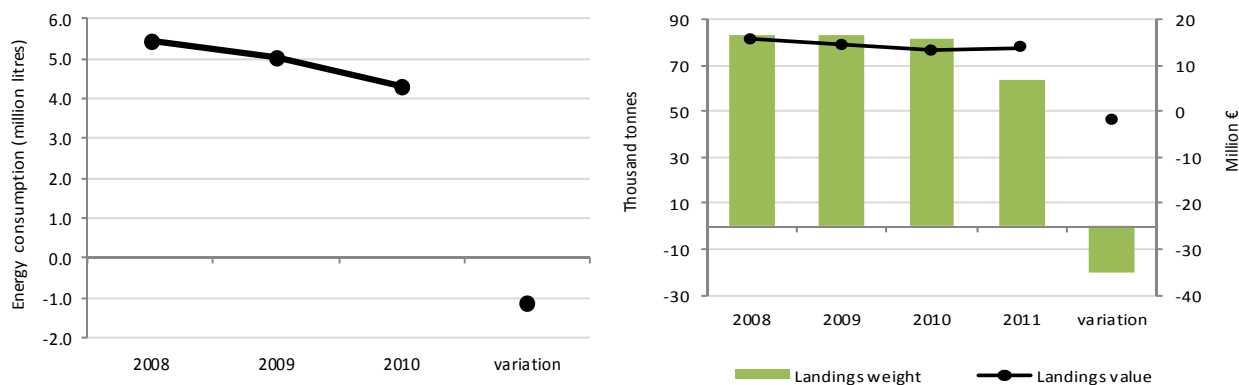


Figure 5.5.2 Estonia national fleet fishing effort (left) and landings trends (right): 2008-2011  
(Source: EU Member States DCF data submissions)

Note: Effort data not provided.

In 2011 European sprat accounted for the highest value of landings by the national Estonian fleet (€5.9 million), followed by Atlantic herring (€4.1 million) and then European perch (€1.5 million). In terms of landings composition, in 2011 European sprat was the most common species landed in weight (35 thousand tonnes), followed by Atlantic herring (25.3 thousand tonnes) and Atlantic cod (1.2 thousand tonnes). This tendency has maintained throughout the time period analysed (fig. 5.5.3).



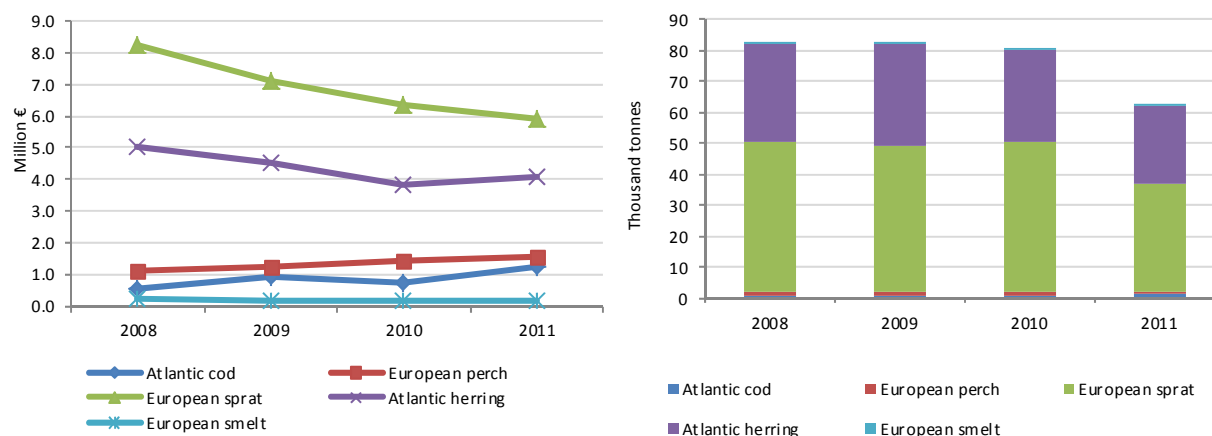


Figure 5.5.3 Estonia national fleet total landings by key species in value (left) and weight (right): 2008-2011  
(Source: EU Member States DCF data submissions)

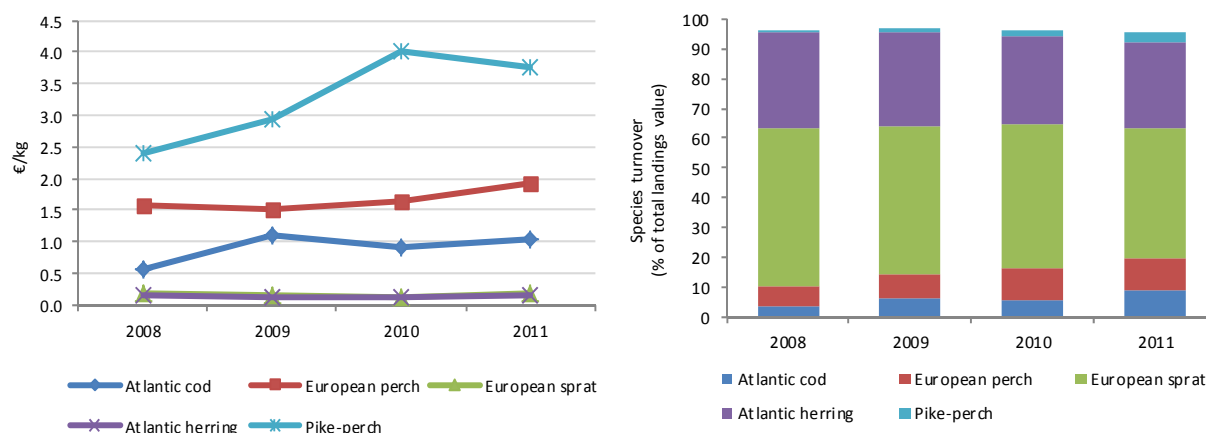


Figure 5.5.4 Total average price (left) and turnover as a percentage of total value of landings (right) for the five key species landed by the Estonian national fleet: 2008-2011  
(Source: EU Member States DCF data submissions)

The prices obtained for these key species generally increased between 2008 and 2011. In terms of prices, in 2011 Pike-perch achieved the highest average price per kilo by the Estonian national fleet (€3.76 per kg), followed by European perch (€1.92 per kg) and Atlantic cod (€1.03 per kg) (fig. 5.5.4, left). The decline in total volumes of landings was the main reason for prices rises in these key species. In terms of turnover, sprat accounted for over 43% of the total landings value in 2011, followed by Atlantic herring at 29% and European perch with 11% (fig. 5.5.4, right).

### 5.5.3 National fleet economic performance

The total amount of income generated by the Estonian national fleet in 2010 was €15.1 million. This consisted of €12.9 million in landings value, €0.1 million in non-fishing income, and €2 million in direct subsidies (Table 5.5.2). The total income of the Estonian fleet decreased 2.6% between 2008 and 2010 (fig. 5.5.5). Decreases in landing volumes was the main reason for this trend.

Total expenditure by the Estonian national fleet in 2010 was €10.3 million, amounting to 80% of total income. The largest expenditure items were crew wages (€4.6 million) and fuel costs (€2.4 million) (Table 5.5.2). Between 2008 and 2010, the total expenditure of the Estonian remained relatively stable.

In terms of profitability, the total amount of GVA, gross profit and economic profit (excluding subsidies) generated by the Estonian national fleet in 2010 was €7.3 million, €2.7 million and €0.5 million, respectively (Table 5.5.2, fig. 5.5.5). Compared to 2008 the total amount of GVA and net profit (excluding subsidies) decreased 22% and 86% in 2010, respectively. In 2010, the Estonian fleet had an estimated capital value of €18 million and an investment of €1.6 million.

Table 5.5.2 Estonia national fishing fleet economic performance indicators: 2008-2011.

Forecast figures for 2011 are highlighted in blue and values are also presented as a percentage of total income (shaded grey columns)

	2008	As % of total income	2009	As % of total income	2010	As % of total income	2011	As % of total income	% change (2010-08)
<b>Income (Million €)</b>									
Landings income	15.30	98.6%	14.08	84.9%	12.92	85.6%	13.78	85.5%	-15.6%
Direct subsidies	0.07	0.5%	2.42	14.6%	2.05	13.6%	2.23	13.9%	2700%
Other income	0.14	0.9%	0.08	0.5%	0.11	0.8%	0.10	0.6%	-19.8%
Fishing rights income	0	0%	0	0%	0	0.1%	0.01	0%	
<i>Total Income</i>	15.52	100%	16.59	100%	15.08	100%	16.12	100%	-2.8%
<b>Expenditure (Million €)</b>									
Crew wages	5.23	33.7%	4.78	28.8%	4.55	30.2%	4.66	28.9%	-12.9%
Unpaid labour	0	0%	0	0%	0.04	0.3%	0.02	0.1%	
Energy costs	3.23	20.8%	2.15	13.0%	2.43	16.1%	n/a		-24.7%
Repair costs	0.84	5.4%	1.30	7.8%	1.44	9.6%	n/a		71.9%
Variable costs	1.47	9.5%	1.42	8.6%	1.37	9.1%	n/a		-7.0%
Non-variable costs	0.54	3.5%	0.61	3.7%	0.49	3.2%	0.48	3.0%	-10.3%
Rights costs	0	0%	0.4	2.5%	0.02	0.1%	0.22	1.3%	
<i>Total operating costs</i>	11.31	72.9%	10.67	64.3%	10.34	68.5%			-8.6%
Depreciation costs	1.28	8.3%	1.56	9.4%	1.68	11.2%	1.62	10.1%	31.2%
Opportunity costs of capital	-0.36	-2.3%	1.30	7.8%	0.58	3.8%	0.51	3.1%	262.0%
<b>Performance Indicators (Million €)</b>									
Gross value added (GVA)	9.36	60.3%	8.68	52.3%	7.30	48.4%	n/a		-22.0%
Gross profit (GRP)	4.13	26.6%	3.90	23.5%	2.71	18.0%	n/a		-34.5%
Net profit (incl. subsidies)	3.28	21.1%	3.47	20.9%	2.49	16.5%	n/a		-24.0%
Net profit (excl. subsidies)	3.20	20.7%	1.04	6.3%	0.45	3.0%	n/a		-86.1%
<b>Capital value (Million €)</b>									
Fleet depreciated replacement value	16.18	104.2%	16.71	100.7%	18.15	120.3%	17.43	108%	12.2%
Fishing rights	2.79	18.0%	2.83	17.1%	2.77	18.3%			
Investments	0.84	5.4%	0.96	5.8%	1.65	10.9%			97.0%
Financial position (%)	30		34		32				6.7%

(Source: EU Member States DCF data submissions)

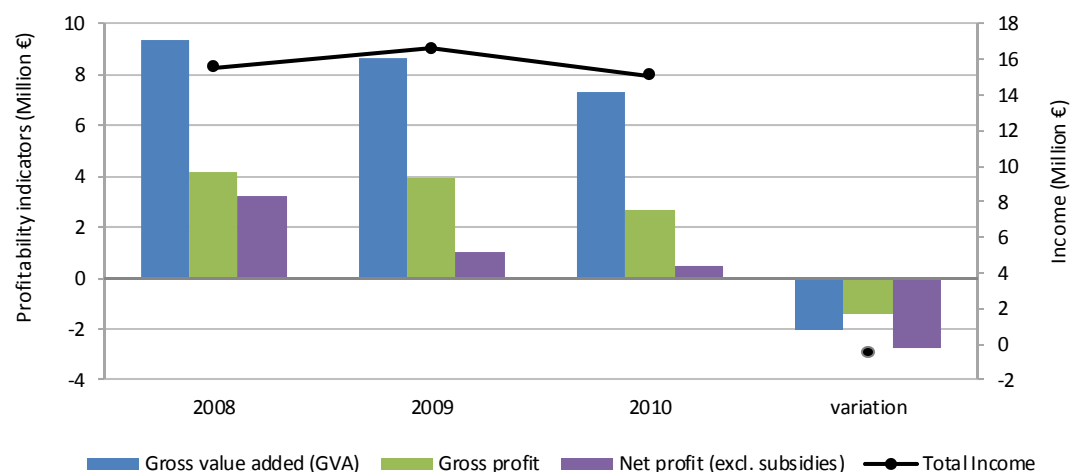


Figure 5.5.5 Estonian national fishing fleet economic performance trends: 2008-2011  
(Source: EU Member States DCF data submissions)

#### 5.5.4 Fleet composition

The Estonian national fleet consisted of 5 fleet segments in 2010. The Estonian fleet is highly diversified with a broad range of vessel types targeting different species predominantly in the Baltic Sea, North Atlantic and Eastern Arctic. There were 3 inactive length classes consisting of 13 vessels. These vessels are classed as inactive if they did not land any catch in 2010. All active segments made profits in 2010.

The 24-40m pelagic trawlers are the most important segment in the Estonian fishing fleet in the Baltic Sea. In 2010 this fleet segment consisted of 35 active vessels accounting for a total of around 4650 GT and 11325 kW. The number of vessels decreased 12.5% between 2008 and 2010 and total kW and GT followed a broadly similar trend. The decrease in the number of vessels also resulted in the decline of employment, which decreased by around 11% between 2008 and 2010.

Pelagic trawlers 24-40m target mainly sprat, herring and cod. The average prices of sprat and herring appear to have maintained similar level between 2008 and 2010. On the contrary, the average price of cod increased during this period. The decrease of quotas for the internationally TAC-regulated species (European sprat and Atlantic herring) was the main reason for falls in total landings volume. This also led to declines in energy consumption and fishing days. Compared to 2009 all profitability indicators showed decreasing trends in 2010.

The segment with the highest number of vessels and employment in the Estonian fleet is the 0-10m passive gears segment that operates in the coastal fishery. In 2010 this segment consisted of 791 vessels accounting for a total of around 1138 GT and 9949 kW. The number of vessels was stable between 2008 and 2010. Compared to 2008, in 2010 the total number of employed decreased by around 48%. The reason for this was the formal requirement that all fishermen dealing with commercial fishing must hold a professional certificate.

The average prices of key species (European perch, Pike-perch, European flounder) for this fleet segment increased between 2008 and 2010. This was a reason for increases in income. On the contrary, the values of GVA and GRP decreased compared to 2009.

Table 5.5.3 provides a breakdown of key performance indicators for all Estonian fleet segments in 2010. A short description of the five segments is provided below.

Table 5.5.3 Estonia national fishing fleet composition and key indicators at fleet segment level for 2010

Fleet Segment	Number of vessels	Vessel tonnage (GT)	Vessel power (kW)	Total employed	FTE (national)	Days at sea	Energy consumption (kilolitres)	Landings weight (tonnes)	Landings value (thousand €)	Direct Subsidies (thousand €)	GVA (thousand €)	Gross profit (thousand €)	Net profit (excl. subsidies) (thousand €)	Net Profit (incl. subsidies) (thousand €)
<b>DTS</b>	<b>5</b>	<b>6750</b>	<b>10462</b>											
VL40XX	5	6750	10462	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>PG</b>	<b>881</b>	<b>1766</b>	<b>14544</b>	<b>1721</b>	<b>309</b>	n/a	<b>592</b>	<b>11240</b>	<b>3396</b>	<b>308</b>	<b>1885</b>	<b>874</b>	<b>313</b>	<b>621</b>
VL0010	791	1138	9949	1381	207	n/a	415	3399	2377	208	1334	626	255	463
VL1012	90	628	4595	340	102	n/a	178	7840	1019	100	551	248	58	158
<b>TM</b>	<b>48</b>	<b>4967</b>	<b>12851</b>	<b>227</b>	<b>212</b>	<b>5153</b>	<b>3731</b>	<b>70053</b>	<b>9744</b>	<b>1738</b>	<b>5416</b>	<b>1835</b>	<b>145</b>	<b>1883</b>
VL1218	13	317	1526	20	10	955	88	3917	510	237	179	98	28	265
VL2440	35	4650	11325	207	202	4198	3643	66136	9234	1501	5238	1737	117	1618

(Source: EU Member States DCF data submissions)

**Pelagic trawlers 24-40m** – 35 vessels make up this segment and are based only in the Baltic Sea. These vessels target pelagic species such as European sprat and Atlantic herring. The total value of landings was €9.2 million and around 202 FTEs were employed in this fleet segment in 2010, contributing to 71.3% and 39% of the total income from landings and FTEs generated by the Estonian fishing fleet, respectively. This fleet segment was profitable, with reported profits of around €1.6 million in 2010. The average vessel in this segment was profitable, generating an income of €307 thousand, gross profit of €50 thousand and net profit of €3.3 thousand in 2010 (fig. 5.5.6).

**Passive gears 0-10m** – Around 791 vessels make up this segment and operate in the inshore area. The fleet targets mostly freshwater species, such as Pike-perch, European perch, but also marine species such as European flounder and Atlantic herring. The total value of landings was €2.4 million and around 207 FTEs were employed in this fleet segment in 2010, contributing to 18.6% and 40% of the total income from landings and FTEs generated by the Estonian fishing fleet, respectively. This fleet segment made a profit in 2010. The average vessel in this segment achieved an income of €3.3 thousand and was slightly profitable, generating a gross profit of €790 and net profit of €320 in 2010 (fig. 5.5.7).

**Passive gears 10-12m** – 90 vessels make up this segment and are based in the inshore area. These vessels target mainly Atlantic herring. The total value of landings was €1 million and around 102 FTEs were employed in this fleet segment in 2010, contributing to 7.7% and 20% of the total income from landings and FTEs generated by the Estonian fishing fleet, respectively. This fleet segment made a profit in 2010.

**Pelagic trawlers 12-18m** – Around 13 vessels make up this segment and operate only in the Baltic Sea. These vessels target pelagic species, such as European sprat and Atlantic herring. The total value of landings was €0.5 million and around 10 FTEs were employed in this fleet segment in 2010, contributing to 3.9% and 2% of the total income from landings and FTEs generated by the Estonian fishing fleet, respectively. This fleet segment made a profit in 2010.

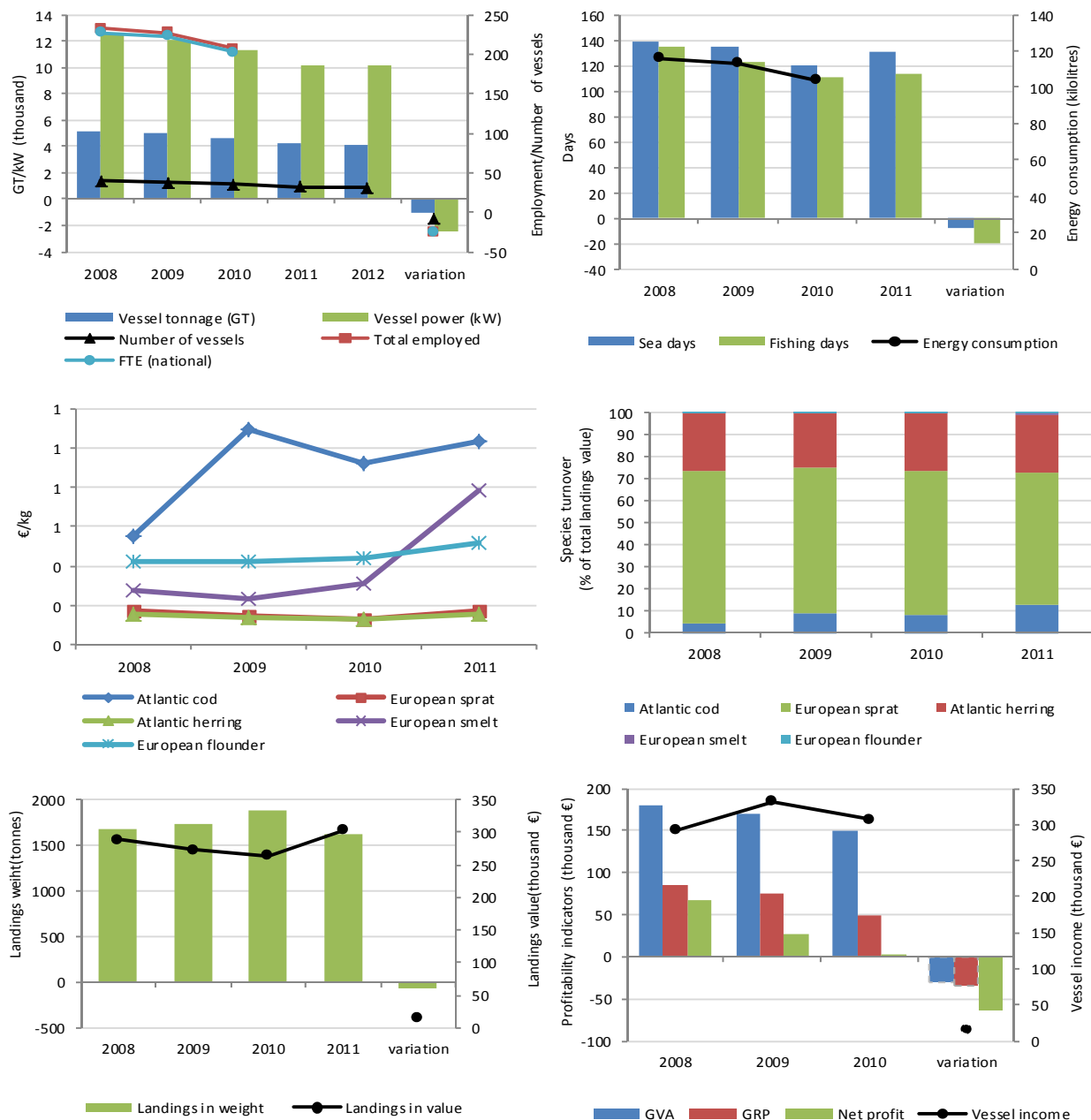


Figure 5.5.6 Key indicators for the average vessel in the Estonia TM VL2440 fleet segment, 2008-2011:

top left – fleet segment capacity and employment; top right – average fishing activity and effort; middle left – average prices (€/kg) for key species; middle right - turnover as a percentage of total value of landings for key species; bottom left – average landings in value and weight; bottom right – main economic performance indicators for the average vessel (variation 2010-2008)

(Source: EU Member States DCF data submissions)

**Demersal trawlers and/or demersal seiners over 40m** – 5 vessels make up this segment and operate predominantly in the North Atlantic and Eastern Arctic. These vessels target a variety of demersal species but mainly this segment is focused on Northern prawn.

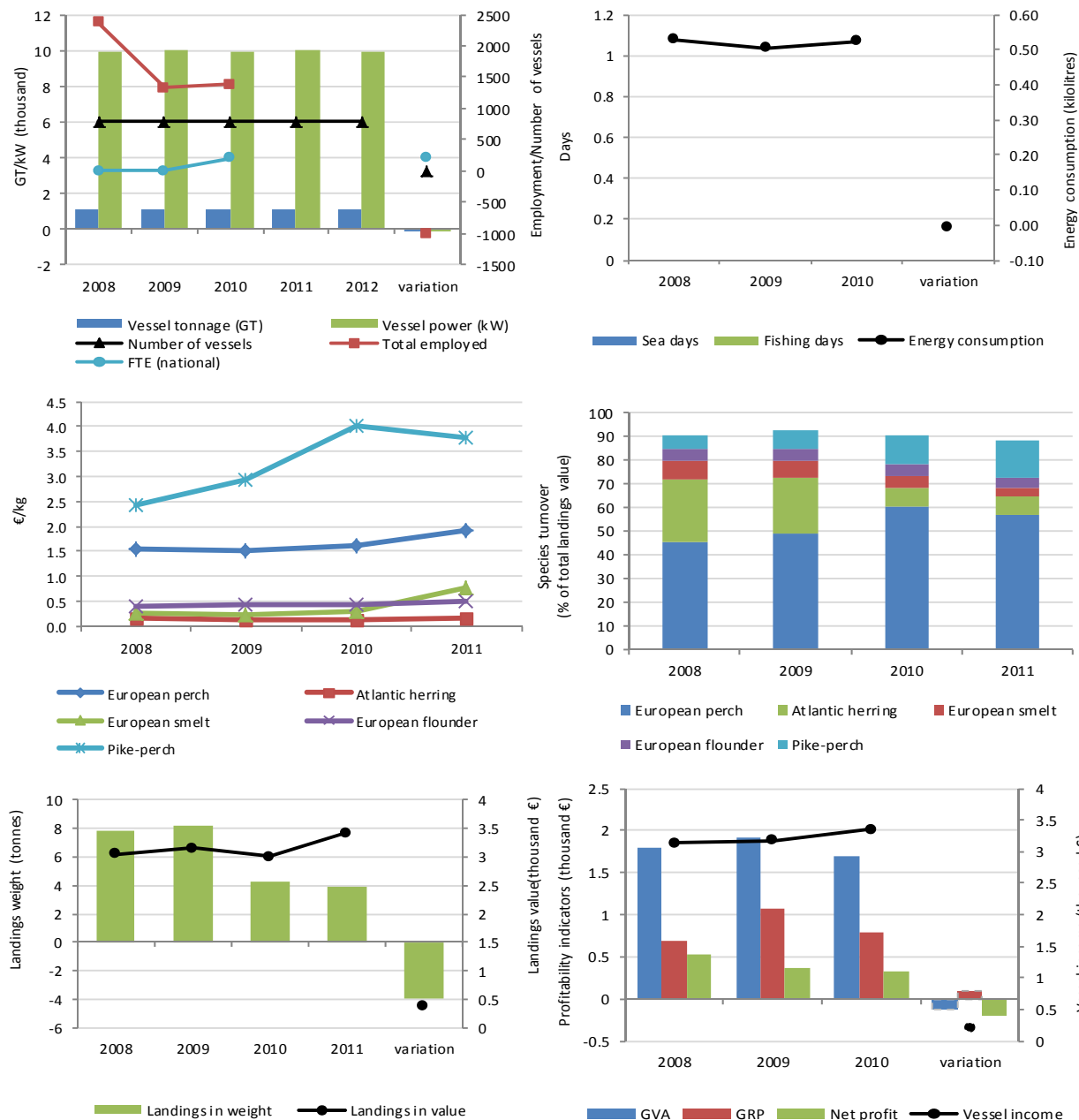


Figure 5.5.7 Key indicators for the average vessel in the Estonia PG VL0010 fleet segment 2008-2011:

top left – fleet segment capacity and employment; top right – average fishing activity and effort; middle left – average prices (€/kg) for key species; middle right - turnover as a percentage of total value of landings for key species; bottom left – average landings in value and weight; bottom right – main economic performance indicators for the average vessel (variation 2010-2008)

(Source: EU Member States DCF data submissions)

### 5.5.5 Assessment for 2011 and 2012

Due to the continuous decrease of quotas for the internationally TAC-regulated species (European sprat and Atlantic herring) the decline in total catches will be expected in 2011 and 2012. However, increases

in average prices are estimated to have resulted 5% increase in income, from €13.1 million in 2010 to €13.8 million in 2011.

In 2011 and 2012 the number of trawlers in the Estonian national fleet continues to decline. However, the number of small coastal vessels will probably increase. The rise in fuel prices can be an important factor influencing economic performance during these years.

#### **5.5.6 Data issues**

Due to confidentiality issues, only capacity data for the deep-sea fleet (DTS VL40XX) were reported. There are only two companies operating with 5 vessels in this segment. Days at Sea and Fishing Days are missing at the national level as the data were not available for the coastal fisheries segments (PG VL0010 and PG VL1012).

The data concerning economic variables were collected as listed and defined in Appendix VI of Commission Decision 2008/949/EC. For economic variables included in Estonian Fisheries Information System (EFIS) (includes log book data, fishing vessel register) data were collected on all members of the population. For other economic variables questionnaires were sent out. It is important to mention that all these surveys have been carried out on a voluntary basis.





## 5.6 FINLAND

### 5.6.1 National fleet structure

In 2012 the Finnish fishing fleet consisted of 3359 registered vessels, with a combined gross tonnage of 15.6 thousand GT, total power of 169.9 thousand kW and an average age of 25 years (Table 5.6.1). The size of the Finnish fishing fleet has followed a slightly increasing trend between 2008 and 2012. The number of vessels increased by 4% (or 119 vessels), while total GT and kW of the fleet declined by 5% and 2%, respectively during the same period (fig. 5.6.1).

Table 5.6.1 Finnish fishing fleet key indicators: 2008-2012

	2008	2009	2010	2011	2012	% change
<b>Capacity</b>						
Number of vessels	3240	3240	3270	3365	3359	3.7
Average vessel age	24	24	24	25	25	7.6
Gross Tonnage (GT, thousand)	16.4	16.9	16.4	16.7	15.6	-5.0
Power (kW, thousand)	173.4	174.8	171.1	172.8	169.9	-2.1
<b>Effort</b>						
Days at sea (thousand)	129.5	143.0	148.9	149.7		15.6
Fishing days (thousand)	128.7	143.0	149.7	148.9		15.7
Energy consumption (Million litres)	6.0	8.7	9.1			51.6
<b>Employment</b>						
Total Employed	1613	1609	1703			5.6
FTE	264	229	313			18.6
<b>Landings</b>						
Weight (thousand tonnes)	111.5	117.5	122.1	119.7		7.4
Value (Million €)	23.1	23.8	26.6	27.5		18.9

(Source: EU Member States DCF data submissions)

Total employment was around 1703 jobs and 313 FTEs in the Finnish fleet in 2010. The level of employment increased between 2008 and 2010, with the total number employed increasing by 6% and the number of FTEs increasing by 19% over the time period (Table 5.6.1; fig. 5.6.1).

The total number of fishing enterprises in the Finnish fleet was 1670 in 2011. The vast majority of fishing enterprises, 97%, owned a single vessel and 3% of enterprises owned two to five fishing vessels. No fishing enterprises owned six or more fishing vessels.

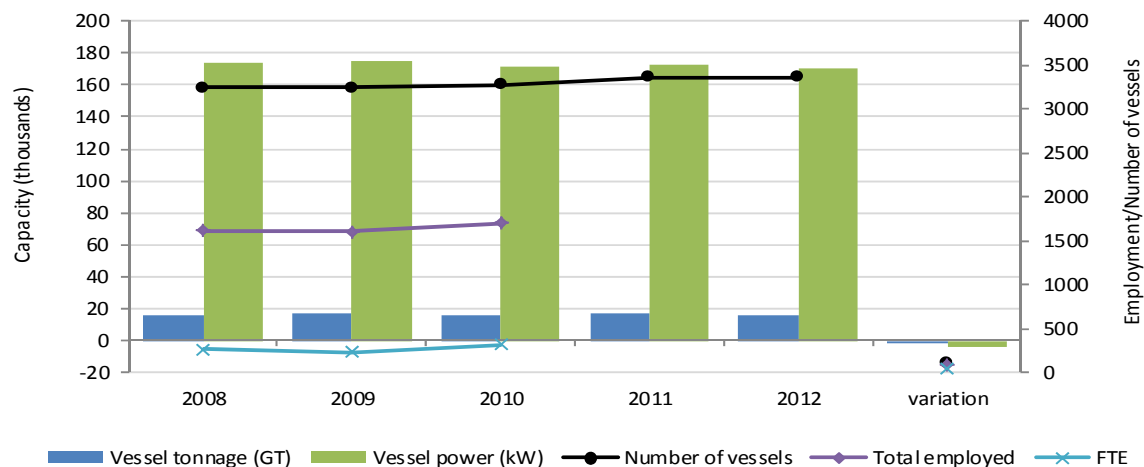


Figure 5.6.1 Finland national fleet capacity and employment trends: 2008-2012  
(Source: EU Member States DCF data submissions)

## 5.6.2 National fleet fishing activity and output

In 2011 (preliminary data), the Finnish fishing fleet spent a total of around 150 thousand days at sea (Table 5.6.1), 99% of which were actual fishing days. The total number of days at sea increased by around 16% between 2008 and 2011, while total fishing days increased during the same period. The total quantity of fuel consumed in 2010 was 9 million litres, an increase of 52% between 2008 and 2010 (fig. 5.6.2, left).

The total volume of landings achieved by the Finnish fleet in 2011 (preliminary) was 120 thousand tonnes of seafood. The total volume of landings has increased between 2008 and 2011 (fig. 5.6.2, right).

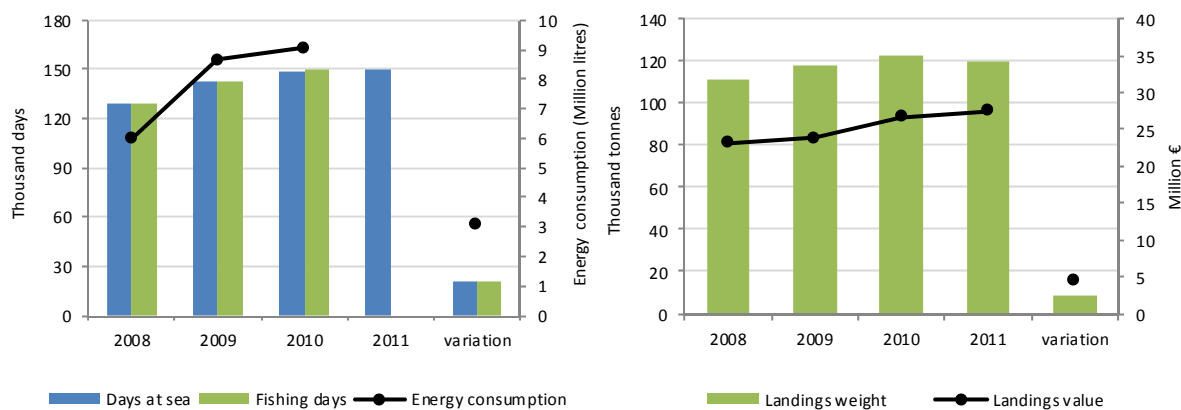


Figure 5.6.2 Finland national fleet fishing effort (left) and landings trends (right): 2008-2011  
(Source: EU Member States DCF data submissions)

The key species in terms of value and weight landed by the Finnish fleet in 2010 were essentially the same species. In 2010, the Atlantic (Baltic) herring accounted for the highest value of landings (€13.5 million) by the national fleet, followed by European sprat (€ 3.6 million), European whitefish (€2.8 million) and Pike-perch (€2 million) (fig. 5.6.3, left). Atlantic (Baltic) herring was the most common

species landed in terms of volume (92.4 thousand tonnes), followed by European sprat (24.6 thousand tonnes) and Atlantic cod (1 thousand tonnes) (fig. 5.6.3, right).

The prices obtained for these key species generally increased between 2008 and 2011. In terms of prices for key species, in 2011 Pike-perch achieved the highest average price per kilo by the Finnish national fleet (€5.4 per kg), followed by European whitefish (€4.2 per kg) and perch (€1.9 per kg) (fig. 5.6.4). Atlantic herring has also dominated landings by the Finnish fleet, accounting for around 50% of the total landed value over the time period in question (fig. 5.6.4, right).

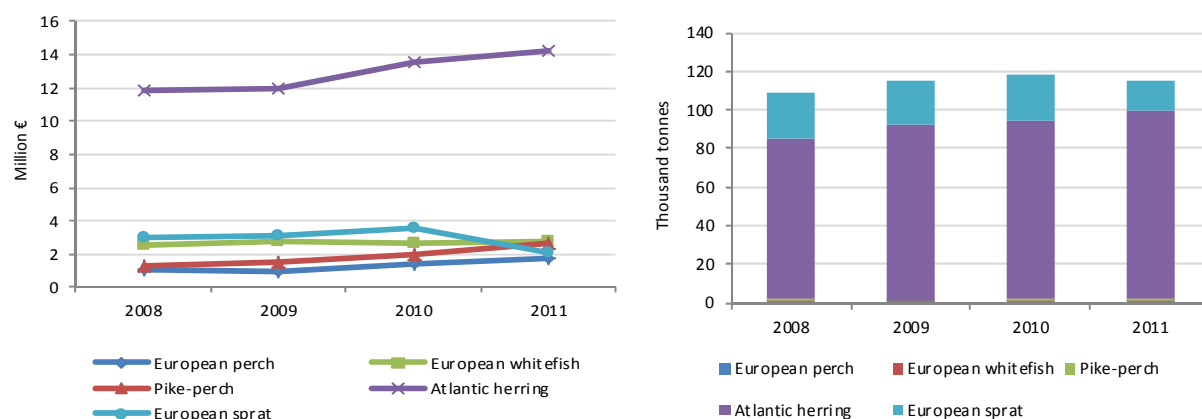


Figure 5.6.3 Finland national fleet total landings by key species in value (left) and weight (right):2008-2011  
(Source: EU Member States DCF data submissions)

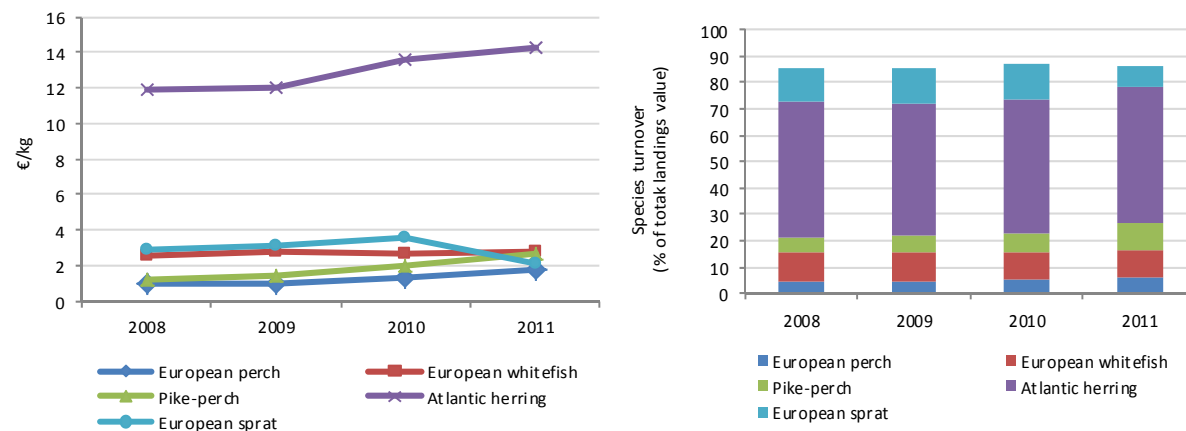


Figure 5.6.4 Total average price (left) and turnover as a percentage of total value of landings (right) for the five key species landed by the Finland national fleet: 2008-2011  
(Source: EU Member States DCF data submissions)

### 5.6.3 National fleet economic performance

The total amount of income generated by the Finnish national fleet in 2010 was €31.6 million. This consisted of €27.1 million in landings values, €3.1 million in non-fishing income, and €1.5 million in direct subsidies (Table 5.6.2). The total income of the Finnish fleet increased 9% between 2008 and 2010 (fig. 5.6.5).

Total operating costs (excluding annual depreciation, and opportunity cost of capital) by the Finnish national fleet in 2010 was €28 million, amounting to almost 89% of total income. The largest expenditure items were crew wages (€3.2 million, not accounting for unpaid labour) and fuel costs (€7.6 million) (Table 5.6.2). Between 2008 and 2010, the total operating costs by the Finnish fleet increased by 21%, fluctuating between €23 million and €28 million.

In terms of profitability, the total amount of GVA and gross profit generated by the Finnish national fleet in 2010 was €12.3 million and €2.5 million, respectively. The Finnish fleet reported a net loss (excluding subsidies) of €2.02 million in 2010 (Table 5.6.2, fig. 5.6.5). In 2010, the Finnish fleet had an estimated depreciated replacement value of €67 million and investments amounting to €4.4 million.

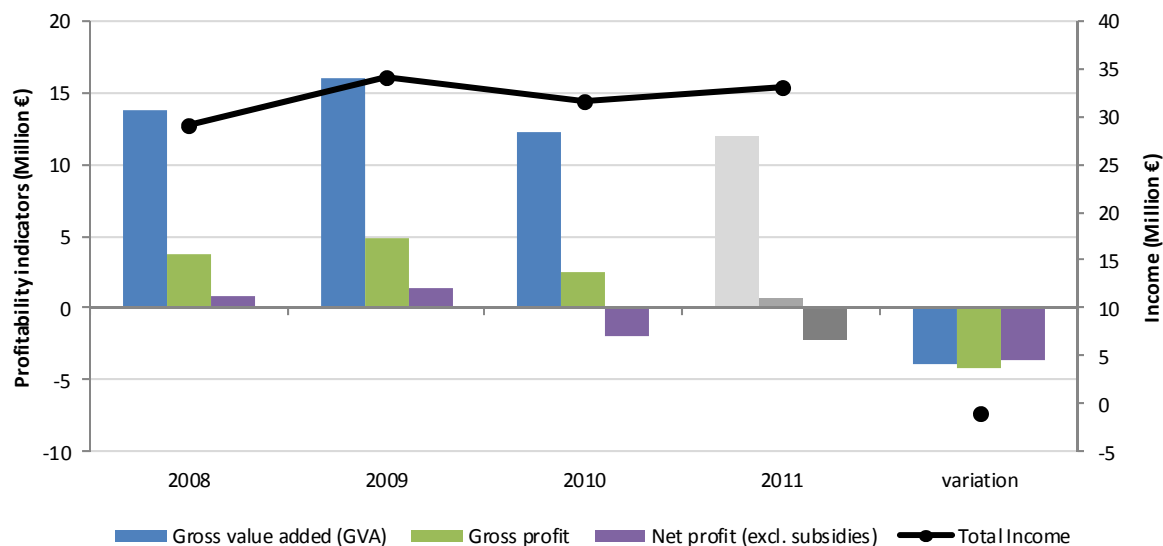


Figure 5.6.5 Finland national fishing fleet economic performance trends: 2008-2011  
(Source: EU Member States DCF data submissions)

Table 5.6.2 Finland national fishing fleet economic performance indicators: 2008-2011.

Forecast figures for 2011 are highlighted in blue and values are also presented as a percentage of total income (shaded grey columns)

	2008	As % of total income	2009	As % of total income	2010	As % of total income	2011	As % of total income	% change (2010-08)
<b>Income (Million €)</b>									
Landings income	24.52	84.5%	27.39	80.6%	27.07	85.6%	27.48	83.1%	10.4%
Direct subsidies	2.23	7.7%	1.46	4.3%	1.46	4.6%	1.46	4.4%	-34.7%
Other income	2.27	7.8%	5.14	15.1%	3.08	9.8%	4.11	12.4%	35.8%
Fishing rights income	0	0%	0	0%	0	0%	0	0%	
<i>Total Income</i>	29.02	100%	34.00	100%	31.61	100%	33.05	100%	8.9%
<b>Expenditure (Million €)</b>									
Crew wages	4.29	14.8%	4.96	14.6%	3.20	10.1%	4.44	13.4%	-25.6%
Unpaid labour	5.68	19.6%	6.11	18.0%	6.57	20.8%	6.90	20.9%	15.6%
Energy costs	5.42	18.7%	5.89	17.3%	7.60	24.1%	9.14	27.7%	40.2%
Repair costs	3.69	12.7%	4.98	14.7%	4.01	12.7%	4.03	12.2%	8.5%
Variable costs	0.94	3.2%	1.47	4.3%	2.24	7.1%	2.25	6.8%	137.7%
Non-variable costs	3.03	10.4%	4.23	12.4%	4.06	12.8%	4.17	12.6%	34.0%
Rights costs	0.2	0.5%	0.3	0.8%	0.3	0.9%	0.3	0.8%	89.2%
<i>Total operating costs</i>	23.2	80.0%	27.9	82.1%	28.0	88.5%	31.2	94.4%	20.5%
Depreciation costs	2.66	9.2%	2.19	6.4%	3.64	11.5%	2.92	8.8%	36.9%
Opportunity costs of capital	0.24	0.8%	1.28	3.8%	0.86	2.7%	0.79	2.4%	264.2%
<b>Performance Indicators (Million €)</b>									
Gross value added (GVA)	13.70	47.2%	15.96	47.0%	12.25	38.7%	12.00	36.3%	-10.6%
Gross profit	3.73	12.9%	4.89	14.4%	2.49	7.9%	0.66	2.0%	-33.4%
Net profit (incl. subsidies)	3.07	10.6%	2.88	8.5%	-0.56	-1.8%	-0.80	-2.4%	-118.2%
Net profit (excl. subsidies)	0.83	2.9%	1.42	4.2%	-2.02	-6.4%	-2.26	-6.8%	-342.1%
<b>Capital value (Million €)</b>									
Fleet depreciated replacement value	63.0	217%	60.6	178%	66.9	211.6%	63.8	193%	6.1%
Investments	5.0	17%	3.4	10%	4.4	14%			-12.9%
Financial position (%)	85.0		56.0		49.0				-42.4%

(Source: EU Member States DCF data submissions)

#### 5.6.4 Fleet composition

The Finnish national fleet consisted of 6 fleet segments in 2010. The Finnish fleet is highly diversified with a broad range of vessel types targeting different species in the Baltic ea. In addition, there were 4 inactive length classes consisting of 1647 vessels. These vessels are classed as inactive if they did not land any catch in 2010. Only one of the active segments (small coastal vessels, PG\_VL0010) made losses in 2010 while the others made an overall profit.

Table 5.6.3 provides a breakdown of key performance indicators for all Finnish fleet segments in 2010. A short description of the five most important segments in terms of total value of landings is provided below.

**Fleet segment TM\_VL1218 (pelagic trawlers 12-18m)** – 22 vessels make up this segment and are based in the Baltic Sea (AREA 27). These vessels target pelagic species such as Atlantic (Baltic) herring, Sprat and vendace. The total value of landings was €1.5 million and around 8 FTEs were employed in this fleet segment in 2010, contributing to 4% and 2.6% of the total income from landings and FTEs generated by the MS fishing fleet, respectively. This fleet segment made a profit of €0.24 million in 2010 (subsidies excluded).

**Fleet segment TM\_VL1824 (pelagic trawlers 18-24m)** – 12 vessels make up this segment and operate in the Baltic Sea (AREA 27). These vessels target pelagic or demersal species, such as Atlantic (Baltic) herring, Sprat and Cod. The total value of landings was €2.4 million and around 13 FTEs were employed in this fleet segment in 2010, contributing to 6% and 4.2% of the total income from landings and FTEs generated by the MS fishing fleet, respectively. This fleet segment made a modest profit of €0.28 million in 2010 (subsidies excluded).

**Fleet segment TM\_VL 2440 (pelagic trawlers >24m)** –17 vessels make up this segment and operate in the Baltic Sea AREA 27. These vessels target pelagic or demersal species, such as Atlantic (Baltic) herring, Sprat and Cod. The total value of landings was €13.7 million and around 71 FTEs were employed in this fleet segment in 2010, contributing to 52% and 22.7% of the total income from landings and FTEs generated by the MS fishing fleet, respectively. This fleet segment made a profit of €0.21 million in 2010 (subsidies excluded). The average vessel in this segment achieved an income of €847 thousand and was profitable with a gross profit of €137 thousand and net profit of €12 thousand in 2010 (fig. 5.6.6).

**Fleet segment PG\_VL0010 (vessels <10m using passive gears)** – 1512 vessels make up this segment and are based in the Finnish coastal areas of the Baltic Sea (AREA 27). These vessels target freshwater species such as European whitefish, pike-perch and European perch. The total value of landings was €8.1 million and around 210 FTEs were employed in this fleet segment in 2010, contributing to 34% and 67.1% of the total income from landings and FTEs generated by the MS fishing fleet, respectively. This fleet segment was unprofitable, with reported losses (excluding subsidies) of around €2.7million in 2010. The average vessel in this segment achieved an income of €8.2 thousand generating a gross loss of €900 and a net loss of €1.6 thousand in 2010 (fig. 5.6.7).

**Fleet segment PG\_VL1012 (vessels 10-12m using passive gears)** – 47 vessels make up this segment and operate in the Finnish coastal areas of the Baltic Sea (AREA 27). The fleet targets a variety of species, such as European whitefish, Atlantic (Baltic) herring and European perch. The total value of landings was €0.8 million and around 10 FTEs were employed in this fleet segment in 2010, contributing to 4% and 3.2% of the total income from landings and FTEs generated by the MS fishing fleet, respectively. This small fleet segment made a profit of €0.04 million in 2010 (subsidies excluded).

Table 5.6.3 Finland national fishing fleet composition and key indicators at fleet segment level for 2010

Fleet Segment	Number of vessels	Vessel tonnage (GT)	Vessel power (kW)	Total employed	FTE (national)	Days at sea	Energy consumption (kilolitres)	Landings weight (tonnes)	Landings value (thousand €)	Direct Subsidies (thousand €)	GVA (thousand €)	Gross profit (thousand €)	Net profit (excl. subsidies) (thousand €)	Net Profit (incl. subsidies) (thousand €)	Cluster
<b>DFN</b>	<b>9</b>	<b>233</b>	<b>1834</b>	<b>9</b>	<b>1</b>	<b>287</b>	<b>24</b>	<b>81</b>	<b>184</b>	<b>0</b>	<b>112</b>	<b>68</b>	<b>25</b>	<b>25</b>	
VL1218	9	233	1834	9	1	287	24	81	184	0	112	68	25	25	CLUSTER1
<b>PG</b>	<b>1559</b>	<b>4140</b>	<b>74907</b>	<b>1560</b>	<b>220</b>	<b>145103</b>	<b>1124</b>	<b>10105</b>	<b>8830</b>	<b>1453</b>	<b>5571</b>	<b>-1049</b>	<b>-2457</b>	<b>-1004</b>	
VL0010	1512	3690	67526	1513	210	143048	978	7787	8064	1362	4872	-1383	-2537	-1176	
VL1012	47	450	7381	47	10	2055	146	2318	766	91	699	334	81	171	CLUSTER2
<b>TM</b>	<b>51</b>	<b>7352</b>	<b>25227</b>	<b>134</b>	<b>92</b>	<b>4273</b>	<b>7921</b>	<b>111914</b>	<b>17614</b>	<b>6</b>	<b>6565</b>	<b>3466</b>	<b>790</b>	<b>796</b>	
VL1218	22	690	4976	22	8	923	165	9175	1503	2	763	510	279	281	CLUSTER3
VL1824	12	818	3879	22	13	936	366	15656	2434	1	1308	626	301	302	
VL2440	17	5844	16372	90	71	2414	7390	87083	13677	3	4495	2330	209	212	CLUSTER4
Cluster Name		Clustered fleet segments													
CLUSTER1		DFN VL1218	HOK VL1218												
CLUSTER2		PG VL1012	FPO VL1218												
CLUSTER3		TM VL1012	TM VL1218												
CLUSTER4		TM VL2440	TM VL40XX												

(Source: EU Member States DCF data submissions)

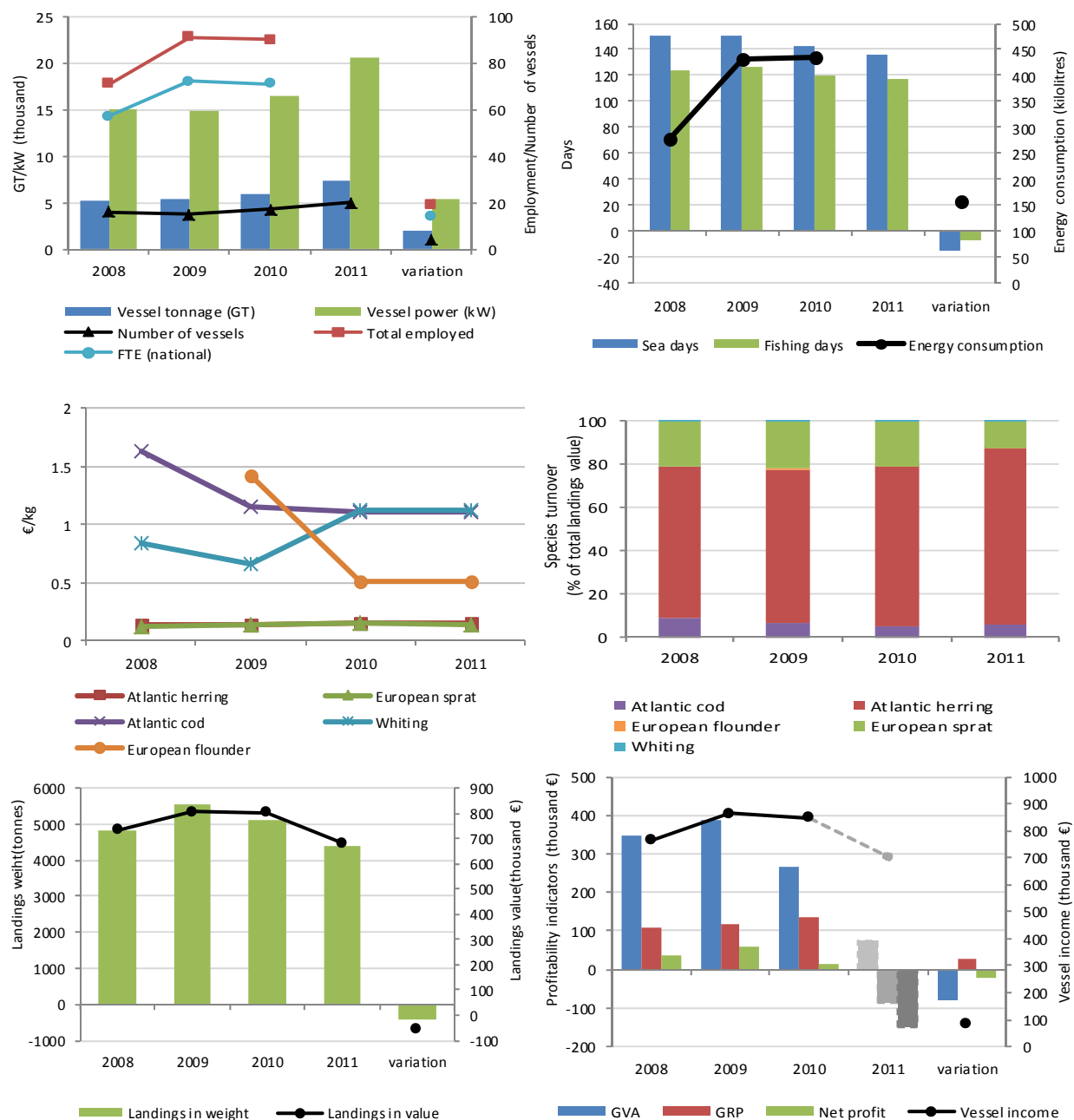


Figure 5.6.6 Key indicators for the average vessel in the Finland TM VL2440 fleet segment, 2008-2011: top left – fleet segment capacity and employment; top right – average fishing activity and effort; middle left – average prices (€/kg) for key species; middle right - turnover as a percentage of total value of landings for key species; bottom left – average landings in value and weight; bottom right – main economic performance indicators for the average vessel (variation 2010-2008)

(Source: EU Member States DCF data submissions)



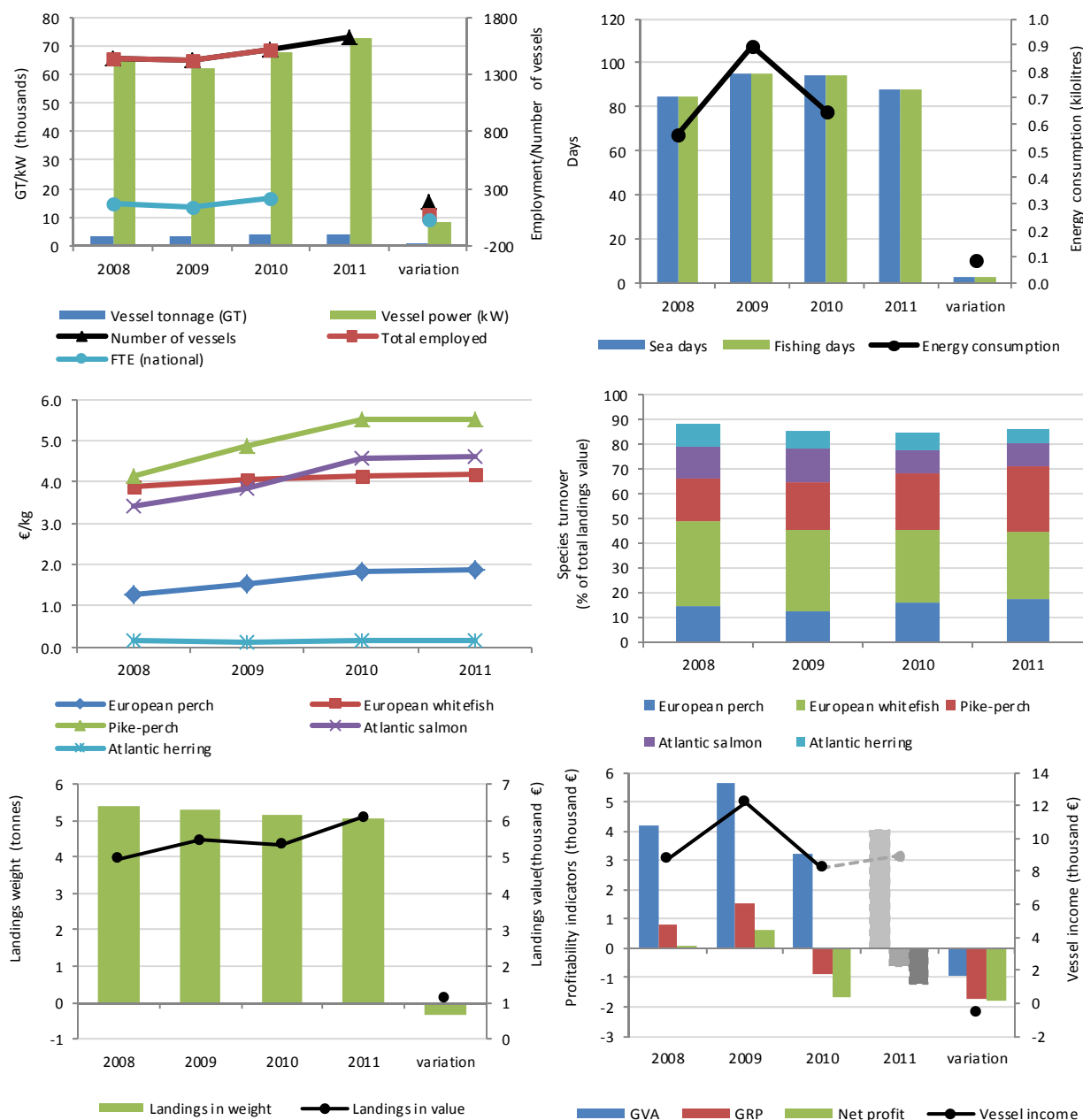


Figure 5.6.7 Key indicators for the average vessel in the Finland PG VL0010 fleet segment 2008-2011:

top left – fleet segment capacity and employment; top right – average fishing activity and effort; middle left – average prices (€/kg) for key species; middle right - turnover as a percentage of total value of landings for key species; bottom left – average landings in value and weight; bottom right – main economic performance indicators for the average vessel (variation 2010-2008)

(Source: EU Member States DCF data submissions)

Capacity has increased slightly in the category TM VL2440, although days at sea decreased after peaking in 2009. The prices of Atlantic herring and European sprat have not changed dramatically during the period years 2008–2011, although cod prices have declined. Whiting has managed to achieve the

strongest market position. The profitability of this fleet segment has decreased after a peak in 2009 (fig. 5.6.6).

The number of vessels has recently increased in the PG VL0010 segment, but capacity has remained stable. Average days at sea peaked in 2009, but have since decreased. During 2008 – 2011, fish prices of the main landings by the fleet segment have risen. Overall, economic results are poor, most probably as a result of high cost structure compared to trends in fish market values (fig. 5.6.7).

#### **5.6.5 Assessment for 2011 and 2012**

Overall, at the Finnish fleet level increases in average prices and other income are estimated to have resulted in an increase of 4.7% in income, from €31.6 million in 2010 to €33.1 million in 2011. Total operation costs are expected to have increased by 14%, mainly due to the increase of fuel costs and labour costs. GVA, gross profit and net profit are expected to decrease to €12 million, €0.7 million and €-2.3 million, respectively in 2011 (Table 5.6.2; fig. 5.6.5).

There have been increasing investments in coastal fisheries, but profits have been hard to gain. The average size of vessels is increasing in the trawler segments. The first sale prices of coastal fishes are rising. The rising fuel costs are significantly impacting fishery businesses.

#### **5.6.6 Data issues**

The newly introduced PIM method has increased the values of depreciation costs compared to previous years' reports. The national implementation of PIM should be studied more closely in the future to adjust, for instance, the assumption of the total depreciation time for engines of different fleet segments.

## 5.7 FRANCE

### 5.7.1 National fleet structure

In 2010, the French fishing fleet consisted of 6100 registered vessels, with a combined gross tonnage of 163.9 thousand GT, total power of 885.1 thousand kW and an average age of 21 years (Table 5.7.1). The size of the French fishing fleet decreased between 2008 and 2010. The number of vessels decreased by 8% (or 505 vessels), while the total GT and kW of the fleet decreased by 13% and 8%, respectively during the same period (fig. 5.7.1). On 1 January 2010, the French fishing fleet consisted of 7 305 vessels (including non-active vessels) with a total power of 1 010 thousand kW. Vessel distribution were as follows: 4857 vessels in Metropolitan France and 2448 vessels in the overseas territories (total power of 263 thousand kW). In accordance with the fleet development plan in overseas territories, the number of vessels registered in these regions remained stable compared to last year and has reached its equilibrium point.

Table 5.7.1 France national fishing fleet key indicators: 2008-2012

	2008	2009	2010	2011	2012	% change
<b>Capacity</b>						
Number of vessels	6605	6475	6100	n/a	n/a	-7.6
Average vessel age	20	21	21	n/a	n/a	4.9
Gross Tonnage (GT, thousand)	188.2	176.3	163.9	n/a	n/a	-12.9
Power (kW, thousand)	958.3	929.4	885.1	n/a	n/a	-7.6
<b>Effort</b>						
Days at sea (thousand)	791.8	790.5	507.1	n/a		
Fishing days (thousand)	311.0	311.5	463.7	n/a		
Energy consumption (Million litres)	313.1	383.5	357.6			14.2
<b>Employment</b>						
Total Employed	11674	11959.67	10871.71			-6.9
FTE	7429	7991.85	8410.41			13.2
<b>Landings</b>						
Weight (thousand tonnes)	433.9	431.4	447.4	n/a		3.1
Value (Million €)	903.8	876.4	924.3	n/a		2.3

(Source: EU Member States DCF data submissions)

Note: Changes in data source and methodology were implemented in 2010, hence, a break in the data series should be taken into account.

The French fishing fleet in metropolitan France in 2010 was as follows:

- 117 industrial fishing vessels and semi-industrial (over 25 meters);
- 925 artisanal fishing vessels and offshore (12 to 25 meters);
- 3 815 small coastal fishing vessels (less than 12 meters).

Brittany remains the metropolitan area with the highest concentration of fisheries, where the number of vessels account for 29% of the total metropolitan fleet and 37% of the total fishing power. Around 17% of the total fleet is registered in the North Sea and Channel (corresponding to 21% of the total power),

while a further 22% of the fleet is registered in the North Atlantic (corresponding to 21% in power). Furthermore, the Mediterranean fleet represents 32% of the total fleet and 21% of the fishing power.

Overall, the metropolitan French fishing fleet is aging: 31% of vessels were built before 1980 (1504 vessels), 42% between 1980 and 1990 (2,054 vessels), 13% between 1991 and 2000 (620 vessels) and 14% after 2000 (679 vessels). The average age of French fleet (mainland + overseas) is 20,7 years, with an observed difference between overseas territories and metropolitan France. The average age of vessels registered in the overseas territories is younger at 14 years, while in metropolitan France the average age is 25 years.

The number of fishing enterprises in the French fleet totalled 5185 in 2010. A large part of the fishing enterprises, 88%, owned a single vessel while 11,7% owned “two to five” fishing vessels, with the latter representing the artisanal fishery. Only 15 enterprises owned “six or more” fishing vessels.

Total employment was around 11 000 jobs and 8 410 FTEs in the French fleet in 2010. The level of employment decreased between 2008 and 2010, with the total number employed decreasing by 3% and the number of FTEs decreasing by 4% over the time period (Table 5.7.1; fig. 5.7.1).

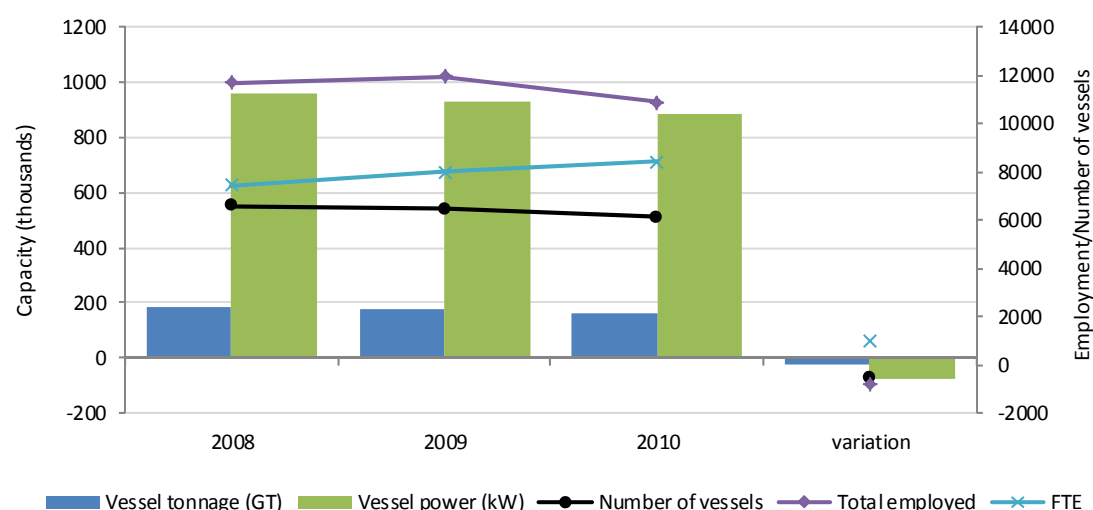


Figure 5.7.1 France national fleet capacity and employment trends: 2008-2012  
(Source: EU Member States DCF data submissions)

In 2010, the “small scale” fisheries is still the sector with the greatest number of employees, roughly 45% of the total workforce, followed by “shellfish fishing” (22%), “long distance” fishing (15%) and coastal fishing (12%). The great “long distance” fishery represents 5% of the total employment. In 2010, Brittany was the region with the highest fishing employment concentration (28%), followed by Aquitaine and Poitou-Charentes (19%) areas, the north façade of Normandy (17%), Mediterranean coast (14%) and overseas territories (11%). The small scale fishery holds the largest number of jobs in almost all regions. Over the period, coastal fishery has seen its enrolment decline by 22%, “long distance” 10%, the small scale fishery lost 6% and shellfish fishing 7%. Between 2008 and 2010, enrolment declined in all regions but with different intensity. Thus, in Northern Normandy enrolment drop by 8.8%, in the overseas territories by 10%, and 11% in the Mediterranean and Pays-de-la-Loire areas.

## 5.7.2 National fleet fishing activity and output

In 2010 the French fishing fleet spent a total of around 507 thousand days at sea (Table 5.7.2), 91% of which were actual fishing days. Fishing days and number of days at sea weren't available for 2008 and 2009. The total quantity of fuel consumed in 2010 was 358 million litres, an increase of around 12% between 2008 and 2010 (fig. 5.7.2, left).

The total volume of landings achieved by the French fleet in 2010 was 447.4 thousand tonnes of seafood. The total volume of landings has remained relatively stable between 2008 and 2011 (fig. 5.7.2, right). A new information system recording landings weight was launched in 2009, and consequently the data is not complete for the years 2008 and 2009 and should be accounted for when analysing the data presented. In 2010, 447 thousand tons of fish, shellfish and other seafood were caught and landed by metropolitan vessels. In quantity, the main species are tuna, scallops, sardines, herring, Atlantic mackerel.

Around 78% of the fishing fleet is based in the North-East Atlantic area. The second fishing zone (10%) is the western Indian Ocean, representing the tropical tuna fisheries. The Atlantic Central East (western Africa) and Mediterranean areas represent 8% and 4% of the landings, respectively. Around 79% of landings are landed in French ports, mainly in the "Brittany" region. 20% of landings are landed in a port of another Member State of the European Union or outside the European Union. Landings share by species families is as follows: fishes: 80%, crustaceans: 9%, cephalopods: 6% and shells: 5%. Two-thirds of the catches of seafood are sold fresh, the rest being split between frozen or processed (e.g. surimi base).

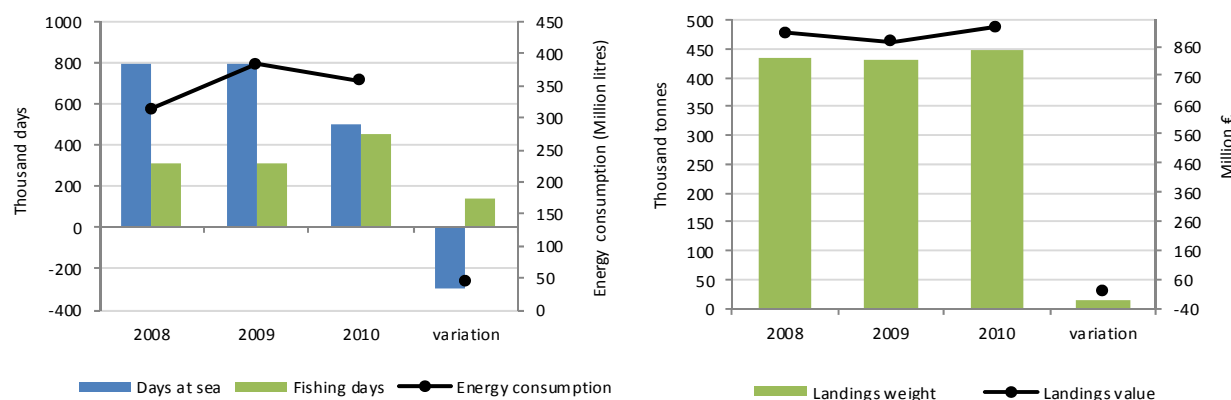


Figure 5.7.2 France national fleet fishing effort (left) and landings trends (right): 2008-2011  
(Source: EU Member States DCF data submissions)

Note: A change of sources and methodology explain some discrepancies between 2010 and the previous years.

In 2010 'sole' accounted for the highest value of landings (€85 millions) by the national fleet, followed by 'albacore tuna' (€61 millions) and then 'scallop' (€55 millions) (fig. 5.7.3, top). In terms of landings composition, in 2010 'common sole' accounted for the highest value of landings (€85,3 million) by the French national fleet, followed by 'monkfishes' (€69,7 million), 'yellowfin tuna' (€60,6 million), and 'Great Atlantic scallop' (€55,3 million).

In 2010, in terms of landings composition, 'albacore tuna' was the most common species landed in volume (42,7 thousand tonnes), followed by 'Listao-tuna' (35,7 thousand tonnes), 'Great Atlantic scallop' (23,9 thousand tonnes) and 'European pilchard' (23,7 thousand tonnes) (fig. 5.7.3, bottom).

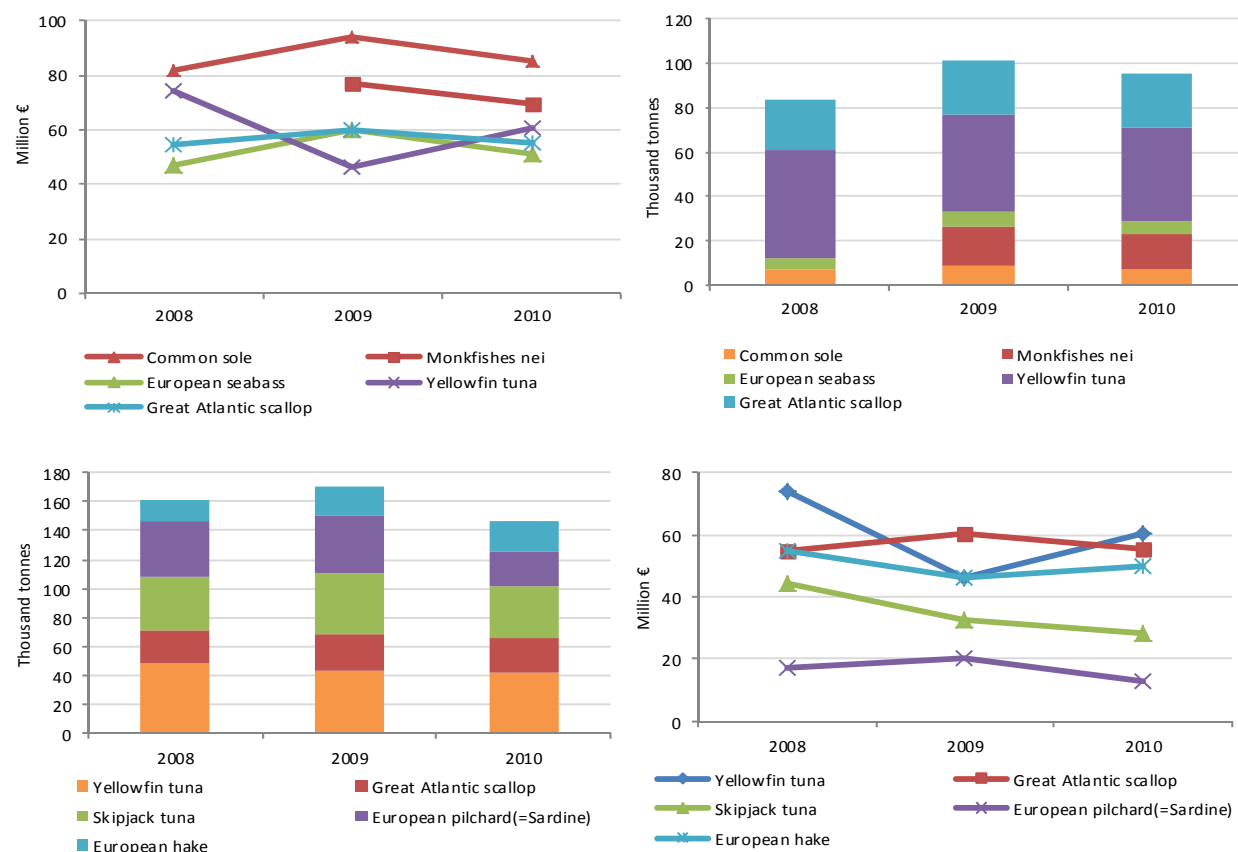


Figure 5.7.3 France national fleet total landings by key species in value (top) and weight (bottom), with corresponding value and weights: 2008-2011  
(Source: EU Member States DCF data submissions)

Average prices reached in 2010 by the top 2 of species, in terms of landings values, are 11,63 €/kg for the 'common sole' (+13%) and 4,35 €/kg for the 'monkfishes' (stable). In terms of turnover, the 5 top species accounted for almost 35% of the total landings value, with sole at 9.2%, followed by monkfishes (7.5%) and yellowfin tuna (6.6%) (fig. 5.7.4)

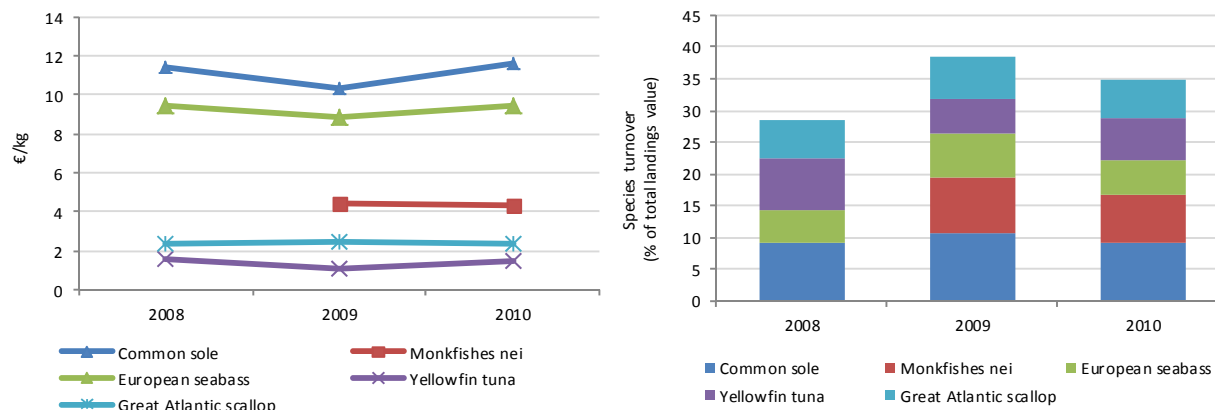


Figure 5.7.4 Total average price (left) and turnover as a percentage of total value of landings (right) for the five key species landed by the French national fleet: 2008-2011  
(Source: EU Member States DCF data submissions)

### 5.7.3 National fleet economic performance

The total amount of income generated by the French national fleet in 2010 was €1043 million. This consisted of €1011 million in landings values, €26 million in non-fishing income, and €6 million in direct subsidies (Table 5.7.2). The total income of the French fleet is stable between 2008 and 2010 (fig. 5.7.5). Total expenditure by the French national fleet in 2010 was €982 million (including 'depreciation' cost in 2010 for the first time), amounting to 94% of total income. The largest expenditure cost items in France were crew wages (€386 million) and energy costs (€180 millions) (Table 5.7.2). Between 2008 and 2010, the total expenditure of the French fleet was stable; it increased by 1.5%, fluctuating between €971 million and €982 million, largely due to changes in fuel costs.

During the first half of 2008 fuel prices increased significantly but decreased during the second half. Fuel prices increased again in the second half of 2009 and during all of 2010. From 2004 until mid-2008 there was a sharp rise in fuel costs. A significant drop was then intervened in the second half of 2008. Rising fuel prices have resumed in the second half of 2009 and continues but at a much slower pace. These variations have had an important impact on the profitability of fishing enterprises. The evolution of diesel prices has a direct impact on vessel operating costs as it represents the second or third highest expenditure depending on the fleet segment, after wages and maintenance and repairs costs.

In terms of profitability, the total amount of GVA, gross profit and net profit (excluding subsidies) generated by the French national fleet in 2010 was €503 million, €117 million and €39 million respectively (Table 5.7.2, fig. 5.7.5). In 2010, the French fleet had an estimated capital value of €106 million.

Table 5.7.2 France national fishing fleet economic performance indicators: 2008-2011.

Forecast figures for 2011 are highlighted in blue and values are also presented as a percentage of total income (shaded grey columns)

	2008	As % of total income	2009	As % of total income	2010	As % of total income	2011	As % of total income	% change (2010-08)
<b>Income (Million €)</b>									
Landings income	999.7	95.8%	1007.6	97.2%	1011.4	96.9%	n/a		1.2%
Direct subsidies	28.1	2.7%	10.7	1.0%	5.9	0.6%	n/a		-78.9%
Other income	15.7	1.5%	18.3	1.8%	26.0	2.5%	n/a		65.5%
Fishing rights income	0	0%	0	0%	0	0%	n/a		
<b>Total Income</b>	<b>1043.5</b>	<b>100%</b>	<b>1036.5</b>	<b>100%</b>	<b>1043.3</b>	<b>100%</b>	<b>n/a</b>		<b>0.0%</b>
<b>Expenditure (Million €)</b>									
Crew wages	392.9	37.7%	403.1	38.9%	386.2	37.0%	n/a		-1.7%
Unpaid labour	n/a		n/a		n/a		n/a		
Energy costs	191.4	18.3%	154.6	14.9%	179.7	17.2%	n/a		-6.1%
Repair costs	71.2	6.8%	85.6	8.3%	80.5	7.7%	n/a		13.1%
Variable costs	65.3	6.3%	136.4	13.2%	127.4	12.2%	n/a		95.0%
Non-variable costs	182.6	17.5%	155.0	14.9%	147.1	14.1%	n/a		-19.4%
Rights costs	0	0%	0	0%	0	0%	n/a		
<b>Total operating costs</b>	<b>903.4</b>	<b>86.6%</b>	<b>934.7</b>	<b>90.2%</b>	<b>920.9</b>	<b>88.3%</b>	<b>n/a</b>		<b>1.9%</b>
Depreciation costs	68.0	6.5%	n/a		61.1	5.9%	n/a		-10.2%
Opportunity costs of capital	11.7	1.1%	n/a		16.6	1.6%	n/a		42.4%
<b>Performance Indicators (Million €)</b>									
Gross value added (GVA)	504.9	48.4%	494.2	47.7%	502.7	48.2%	n/a		-0.4%
Gross profit	112.0	10.7%	91.1	8.8%	116.5	11.2%	n/a		4.1%
Net profit (incl. subsidies)	60.4	5.8%	101.8	9.8%	44.8	4.3%	n/a		-25.9%
Net profit (excl. subsidies)	32.3	3.1%	n/a		38.9	3.7%	n/a		20.3%
<b>Capital value (Million €)</b>									
Investments	105.7	10.1%	138.3	13.3%	106.4	10.2%			
Fleet depreciated replacement value	n/a		n/a		n/a				
Financial position (%)	n/a		n/a		n/a				

(Source: EU Member States DCF data submissions)

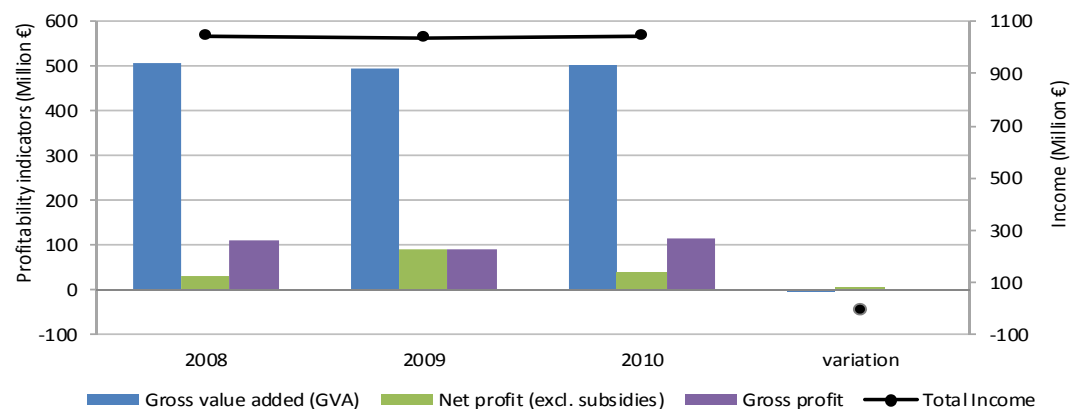


Figure 5.7.5 France national fishing fleet economic performance trends (variation 2010 to 2008): 2008-2011

(Source: EU Member States DCF data submissions)



#### 5.7.4 Fleet composition

The French national fleet consisted of 72 fleet segments (metropolitan France) in 2010. The French fleet is highly diversified with a wide range of vessel types targeting different species, predominantly in area 27. The inactive segments consist of 939 vessels. These vessels are classed as inactive if they did not land any catch in 2010.

Table 5.7.3 provides a breakdown of key performance indicators for all French fleet segments in 2010. A description of the most important segments in terms of total value of landings is given below:

**Drift and fixed nets 10-12m** – 184 vessels make up this segment (excluding overseas) and are predominantly based in area 27. In 2010 this segment accounted for a total of 2,335 GT and 30,450 kW (need to be updated) (excluding overseas). Average vessel age for this fleet segment was 20,7 years in 2010 and average size is 11 meters in length. The number of vessels decreased 3% between 2009 and 2010, a trend broadly followed by GT and kW. These vessels operate mainly in the Atlantic sea, and generated average incomes of around €260 thousand per vessel (stable compared to 2009). In 2010 the average days at sea per vessel was 164. The three top species landed in terms of value were common sole, anglerfish and European sea bass.

The total value of landings was €42.7 million and 617 jobs were supported by this segment in 2010. The top three species landed by the vessels in this segment in terms of value, were common sole, anglerfish and European sea bass, but sole represented 47% of the total landed value in 2010. This specie is very important for income in this segment. The average price of common sole increased by 5% in 2010 compared to 2009. Fuel consumption is lower for this segment because of the nature of their activity. Fuel costs reached about 7% of total income in 2010, an increase when compared to 2009, due to the increase in fuel prices during year 2010.

**Drift and fixed nets 12-18m** – 96 vessels make up this segment (excluding overseas) and are based predominantly in area 27. The top three species in terms of value landed are common sole, anglerfish and spinous spider crab (code FAO: SCR). The total value of landings was €36.4 million and 369 jobs were supported by this segment in 2010. In 2010, the ratio operating cash flow / income reaches 14,7% In the Atlantic (fig.5.7.6).

**Demersal trawl / seine 12-18m** – 164 vessels make up this segment (excluding overseas) and they are based predominantly in the area 27. These vessels target a variety of species. The top three species in terms of value landed by these vessels in 2010 were nephrops (lobster), anglerfish and sole. Their total value of landings was €71.4 million and 603 jobs were supported by this segment in 2010. The ratio operating cash flow / income reaches 14,3% in 2010.

**Demersal trawl/seine 18-24m** – 184 vessels make up this segment (excluding overseas), accounting for a total of 23,7 thousand GT and 80,098 kW and are based predominantly in area 27 (Atlantic, North Sea and the Channel). The average age of the vessels in this fleet segment was 20,7 years in 2010 and average size was 21,5 meters in length. The number of vessels in this fleet segment decreased 8% between 2009 and 2010. These vessels target a variety of species. The three most important in terms of value landed by this segment is anglerfish, nephrops (lobster) and squid (code FAO: SQZ). The total value of landings was €132 million and 1,012 jobs were supported by this segment in 2010. Overall profitability of exploitation reached 11.1% in 2010. These vessels operate mainly in the Atlantic and Mediterranean Sea. They generated an average income of around €760 thousand per vessel in 2010 (+10% compared with 2009). In 2010 the average days at sea per vessel was 263. It is important to distinguish between supra region at this stage, because even if the vessels are in the same fleet segment, they have very different fishing activities, in terms of target species or number of days at sea.

For example, the three most landed species by vessels working in the Atlantic Sea in terms of value are anglerfish, Norway lobster and inshore squids. For vessels operating in the Mediterranean Sea, the three most landed species in terms of value were European hake, inshore squids and European seabass. Anglerfish represented 53% of the total landings value for vessels in the Atlantic Sea, while European hake represented 25% for vessels in Mediterranean Sea in 2010. Average prices followed a different trend between the Atlantic and the Mediterranean. The average prices of the top two species remained rather stable in both supra regions.

For all vessels in this fleet segment (Atlantic and Mediterranean Sea), total income increased by 2% in 2010. The increase in price of fuel observed in 2010 (this segment is characterised by a strong dependence with the fuel) had a negative impact on the total costs of exploitation. The situation differs between regions. In the Atlantic, the increase of total running costs compensated in part by the increase of total income improved profitability. In the Mediterranean Sea, the increase in fuel price had been compensated by the increase of total income. This French fleet segment is the most important in terms of turnover generated. However, vessel dependency on high energy consumption, dependency of quota species and ageing vessels limits possibilities for further development. For economic profit, the indicator presented for 2010 cannot be compared with the previous year as the depreciation indicator could not be estimated for all segments.

**Demersal trawl / seine 24-40m** – 98 vessels comprise this segment (excluding overseas) and are based predominantly in area 27. The three top species landed in terms of value by the vessels of this segment are anglerfish, squid (code FAO: SQZ) and European hake. Their total landings value was €80.8 million and 559 jobs were supported by this segment in 2010. The ratio operating cash flow / income reaches 5,7% in 2010 In the Atlantic and 5,0% in Mediterranean Sea, in diminution compared to year 2009.

**Demersal trawl / seine +40** – 11 vessels comprise this segment and are based predominantly in area 27. The three top species landed in terms of value by the vessels of this segment are saithe (Pollock), black scabbardfish and blue ling. Their total landings value was €31 million and 230 FTE were supported by this segment in 2010 (fig. 5.7.7)

Table 5.7.3 France national fishing fleet composition and key indicators at fleet segment level for 2010

Fleet Segment	Number of vessels	Vessel tonnage (GT)	Vessel power (kW)	Total employed	FTE (national)	Days at sea	Energy consumption (kilolitres)	Landings weight (tonnes)	Landings value (thousand €)	Direct Subsidies (thousand €)	GVA (thousand €)	Net profit (excl. subsidies) (thousand €)	Net Profit (incl. subsidies) (thousand €)	Cluster
<b>DFN</b>	<b>1422</b>	<b>20206.21</b>	<b>161061</b>	<b>2688</b>	<b>2091</b>	<b>119937.32</b>	<b>28140</b>	<b>37486</b>	<b>149790</b>	<b>1364</b>	<b>125441</b>	<b>26077</b>	<b>27441</b>	
VL0010	562	1760	45438	506	355	38384	3499	3979	17760	81	16811	1161	1242	
VL1012	219	2541	32750	617	512	30258	6576	9546	42702	61	29954	3804	3865	
VL1218	97	3469	19949	369	310	17771	5929	7035	36424	79	21391	2517	2596	
VL1824	39	4493	14106	265	223	8753	4896	6514	27969	0	14485	1724	1724	
VL2440	23	5754	12282	309	286	5004	4380	9396	19854	1143	17535	3277	4420	
VL40XX	1	791	1472											
VL0006	74	74	2196	79	48	1937	214	140	434	0	1649	477	477	
VL0612	407	1324	32868	543	357	17830	2647	876	4647	0	23617	13118	13118	
<b>DRB</b>	<b>267</b>	<b>6704</b>	<b>43920</b>	<b>798.3</b>	<b>534.96</b>	<b>30797</b>	<b>19114</b>	<b>33423</b>	<b>50844</b>	<b>257</b>	<b>35036</b>	<b>2550</b>	<b>2807</b>	
VL0010	74	507	6360	130	64	5486	821	4877	4862	0	4508	599	599	
VL1012	85	1281	11382	240	164	9529	4610	12221	12752	78	10369	763	840	
VL1218	87	4019	21662	379	273	13952	11626	13786	27471	141	17741	688	828	
VL1824	8	728	2761			1340		2298	4985	0				CLUSTER2AREA27
VL2440	1	123	589	37.3	29.16	208	1931	221	674	39	2127	403	442	CLUSTER2AREA28
VL0006	3	5	188			70		2	1	0				
VL0612	9	41	978	12	4.8	213	126	19	99	0	291	97	97	
<b>DTS</b>	<b>730</b>	<b>63585</b>	<b>214179</b>	<b>3005.71</b>	<b>2621.7</b>	<b>149217</b>	<b>191110</b>	<b>143191</b>	<b>353501</b>	<b>2568</b>	<b>153387</b>	<b>-1059</b>	<b>1508</b>	
VL0010	96	662	8110	134	92	15016	2745	1212	5945	16	5795	499	514	
VL1012	155	2200	19878	358	259	23190	11653	8525	29203	91	19583	2104	2194	
VL1218	164	7676	40945	603	501	36219	30390	21547	74428	359	38820	3340	3699	
VL1824	206	23902	80079	1121.71	1041.7	48379	78649	52832	131833	1540	54795	204	1744	
VL2440	98	17304	44636	559	498	23321	46615	34173	80830	562	24834	-2734	-2172	
VL40XX	11	11841	20531	230	230	3091	21057	24903	31263	0	9561	-4471	-4471	
<b>FPO</b>	<b>850</b>	<b>4584</b>	<b>74602</b>	<b>853</b>	<b>628</b>	<b>46107</b>	<b>8230</b>	<b>16524</b>	<b>41263</b>	<b>120</b>	<b>34267</b>	<b>3996</b>	<b>4116</b>	
VL0010	652	1607	52080	463	326	29491	3525	6543	19523	8	18346	3003	3010	
VL1012	65	689	10312	171	146	9685	2690	6003	12539	0	9659	984	984	
VL1218	9	350	1794	30	27	1304	339	987.4138	1958.9683	77.4	1147	3	80	
VL1012	65	689	10312	171	146	9685	2690	6002.867	12539.385	0	9659	984	984	
VL1218	9	350	1794	30	27	1304	339	987.4138	1958.9683	77.4	1147	3	80	
VL1824	17	1800	5975	78	64	2339	1489	2685.405	5670.5986	34.3	3138	-555	-520.5	
VL0006	74	65	1801	78	48	2330	113	174.0279	982.46836	0	1298	346	345.9	
VL0612	33	72	2640	33	17	958	73	131.3003	588.35066	0	678.939	216.0	216.0	

(Source: EU Member States DCF data submissions)

Table 5.7.3 France national fishing fleet composition and key indicators at fleet segment level for 2010 cont.

Fleet Segment	Fleet Segment	Number of vessels	Vessel tonnage (GT)	Vessel power (kW)	Total employed	FTE (national)	Energy consumption (kilolitres)	Landings weight (tonnes)	Landings value (thousand €)	Direct Subsidies (thousand €)	GVA (thousand €)	Net profit (excl. subsidies) (thousand €)	Net Profit (incl. subsidies) (thousand €)	Cluster	
HOK	922	7246	113757	512.81	395	50714.13	6067.851	9666.75983	40228.857	20.523	22529.83729	5855.0167	5875.539744		
	VL0010	753	2285.78	82012	351	262	39112.25	3737.386	3184.03567	19070.3187	20.309	14605.737	3700.8497	3721.158719	
	VL1012	72	719.43	12598	115	92	7286.26	1774.288	2172.12439	9020.10942	0.214	5756.063	790.42897	790.6429716	
	VL1218	26	807.51	5896	46.81	41	586.02	556.17699	1587.32201	5306.56829	0	2168.03729	234.03703	234.0370334	CLUSTER5AREA37
	VL1824	9	1323.01	3599			305.91	792.63812	2457.61243	0					CLUSTER5AREA27
	VL2440	8	1913.96	4754			1243.09	1833.2122	3939.08622	0		1129.701	1129.70102		CLUSTER5AREA27
	VL0006	8	10.67	217			125	4.9276	4.81478	0					CLUSTER5AREA37
	VL0612	46	185.64	4681			2055.6	92.49984	430.34716	0					CLUSTER5AREA37
MGO	176	590.69	11175	212.16	125.26	20890.19	1919.8098	784.04599	5598.99004	13.41225	8115.16406	1217.3905	1230.802759		
	VL0010	151	422.38	9428			16644.61	699.82713	5189.90899	0					CLUSTER3AREA27
	VL1012	11	86.58	973	195.71	108.81	3838.58	1837.7795	44.28702	349.3701	13.41225	7377.25298	1036.5131	1049.925349	CLUSTER3AREA27
	VL0006	1	1.4	18						0					CLUSTER5AREA37
	VL0612	13	80.33	756	16.45	16.45	407	82.03025	39.93184	59.71095	0	737.91108	180.87741	180.87741	CLUSTER5AREA37
MGP	125	4810	22647	429.5	324.5	18726	17706	17656	30139	216	22028	2555	2771.4		
	VL0010	23	161	1932	50	32	2390	887	3163	1473	46.0	2804.7	948	994.4	
	VL1012	49	745	6641	145	101	6614	3877	3543	7954	24.5	7279.0	1155	1179.4	
	VL1218	35	1449	7946			6384		4722	10994					CLUSTER4AREA27
	VL1824	3	420	1263	161.5	126.47	498	6534	1502	1538		8906.2	887	887.2	CLUSTER4AREA27
	VL2440	13	2018	4706	73	65	2792	6408	4714	8176	145.9	3038.5	-436	-289.7	
	VL0612	2	16	159			47		13	3	0				
PGO	331	542	17426	358.35	201.73	9882	809	4188	1895	3.6	10814.7	2710	2713.6		
	VL0010	184	276	9079			7327		763	1353	0				CLUSTER6AREA27
	VL1012	5	61	644	191.35	109.73	249	484	3239	98	3.6	7093	1538	1542	CLUSTER6AREA27
	VL0006	68	58	1925	73	40	957	155	107	339	0	1843	626	626	
	VL0612	74	146	5778	94	52	1349	170	79	105	0	1879	546	546	
PGP	926	2308	97594	289.7	232.7	18609	2100	2370	12642	6.3	9508	1164	1170		
	VL0010	766	1734	84520	125	97	10930	930	1213	8354	4.4	4237	185	189	
	VL1012	22	207	4540	30	25	1766	301	445	1489	0.9	1060	28	29	
	VL1218	5	117	852	75.7	74.7	721	721	296	1063	1.1	3138	611	612	CLUSTER7AREA37
	VL0006	58	50	1657	59	36	1821	148	100	350	0	1072	340	340	
	VL0612	75	200	6025			3371		317	1387	0				CLUSTER7AREA37

(Source: EU Member States DCF data submissions)

Table 5.7.3 France national fishing fleet composition and key indicators at fleet segment level for 2010 cont.

Fleet Segment	Fleet Segment	Fleet Segment	Number of vessels	Vessel tonnage (GT)	Vessel power (kW)	Total employed	Energy consumption (kilolitres)	Landings weight (tonnes)	Landings value (thousand €)	Direct Subsidies (thousand €)	GVA (thousand €)	Net profit (excl. subsidies) (thousand €)	Net Profit (incl. subsidies) (thousand €)	Cluster
PMP	169	4182	20964	339.07	259.12	19059	4718	13474	20191	109.1	18267	3147	3256	
VL0010	65	403	5593	99	78	6595	1044	3534	4472	11.8	4733	672	684	
VL1012	72	841	8562	181	129	9987	2489	8437	12024	15	10702	2055	2071	
VL1218	11	325	2308			1685		1214	2861					CLUSTER7AREA27
VL2440	1	227	589	39.12	39.12	154	926	184	564	82	1986	117	199	CLUSTER7AREA27
VL40XX	1	2343	2610											
VL0006	9	10	417			250		34	104					CLUSTER7AREA37
VL0612	10	33	885	19.95	13	388	258	71	166		846	302	302	CLUSTER7AREA37
PS	110	33333	74473	942.94	626.66	9722	51902	111567	129048	712	39051	-7558	-6847	
VL0010	21	50	2571											
VL1012	2	18	278			228		263	407					CLUSTER1AREA27
VL1218	30	1006	6382			3382		21925	14449					CLUSTER1AREA27
VL1824	7	374	2203	251.94	155.66	499	1624	2068	1840	707	10497	982	1689	CLUSTER1AREA27
VL2440	10	1960	5592	120		1	455	732	7028	5	3904	2227	2232	
VL40XX	24	29818	55445	511	438	4866	49574	86221	104284	0	23435	-10918	-10918	
VL0612	16	108	2002	60	33	746	249	358	1041	0	1215	150	150	
TBB	7	347	1790	26	23	1165	972	597	2225	0	1096	-306	-306	
VL1218	7	347	1790	26	23	1165	972	597	2225	0	1096	-306	-306	
TM	65	15477	31549	416.16	369.16	12274	24468	56503	86931	536	23038	-421	115	
VL0010	1	1	74			10				0				
VL1012	7	81	1190	18	14	1037	449	1308	2109	2	1115	155	157	
VL1218	17	888	5040	90	75	3577	3202	4588	10112	40.9	4788	668	709	
VL1824	29	3387	11111	160	132	5844	11049	10833	23560	493	9070	-1093	-601	
VL2440	7	1128	2610	29.16	29.16	1165	2331	3023	3827	1.2	1264	5	6	
Cluster		Clustered fleet segments												
CLUSTER1AREA27		PS VL1012			PS VL1218				PS VL1824					
CLUSTER2AREA27		DRB VL1824			DRB VL2440									
CLUSTER3AREA27		MGO VL0010			MGO VL1012									
CLUSTER4AREA27		MGP VL1218			MGP VL1824									
CLUSTER5AREA27		HOK VL1824			HOK VL2440									
CLUSTER6AREA27		PGO VL0010			PGO VL1012									
CLUSTER7AREA27		PMP VL1218			PMP VL1824				PMP VL2440					
CLUSTER5AREA37		HOK VL0006			HOK VL0612				HOK VL1218					
CLUSTER7AREA37		PGP VL0612			PGP VL1218				PMP VL0006			PMP VL0612		
CLUSTER1AREA37		DTS VL1218			DTS VL1824									
CLUSTER2AREA37		TM VL1824			TM VL1240									
CLUSTER3AREA37		PS VL1218			PS VL1824									
CLUSTER4AREA37		DRB VL0006			DRB VL0612									
CLUSTER5AREA37		MGO VL0006			MGO VL0612									
CLUSTER1AREAOFR		HOK VL1824			HOK VL2440									

(Source: EU Member States DCF data submissions)

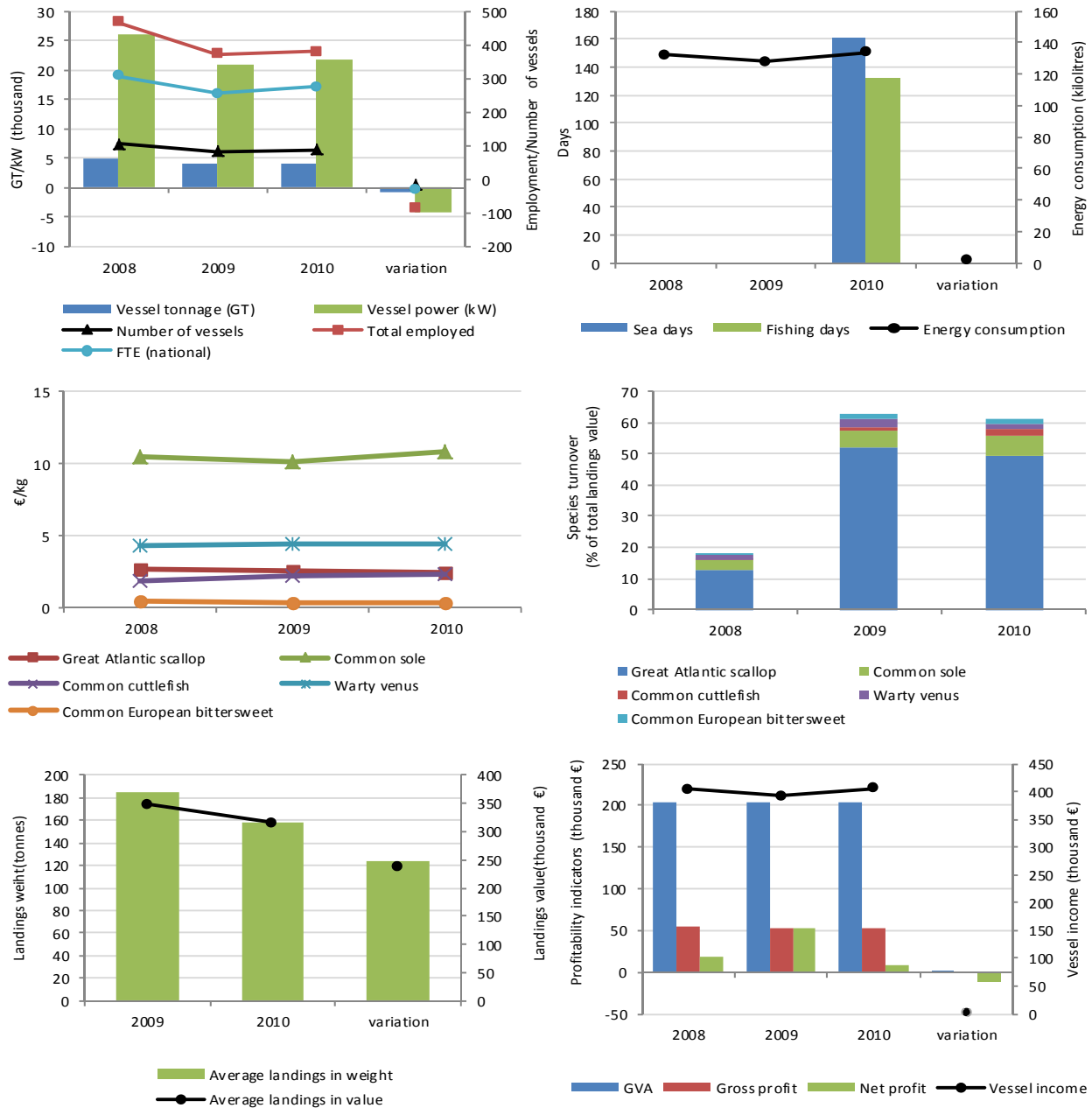


Figure 5.7.6 Key indicators for the average vessel in the France DRB VL1218 fleet segment, 2008-2011:  
top left – fleet segment capacity and employment; top right – average fishing activity and effort; middle left – average prices (€/kg) for key species; middle right - turnover as a percentage of total value of landings for key species; bottom left – average landings in value and weight; bottom right – main economic performance indicators for the average vessel (variation 2010-2008)

(Source: EU Member States DCF data submissions)

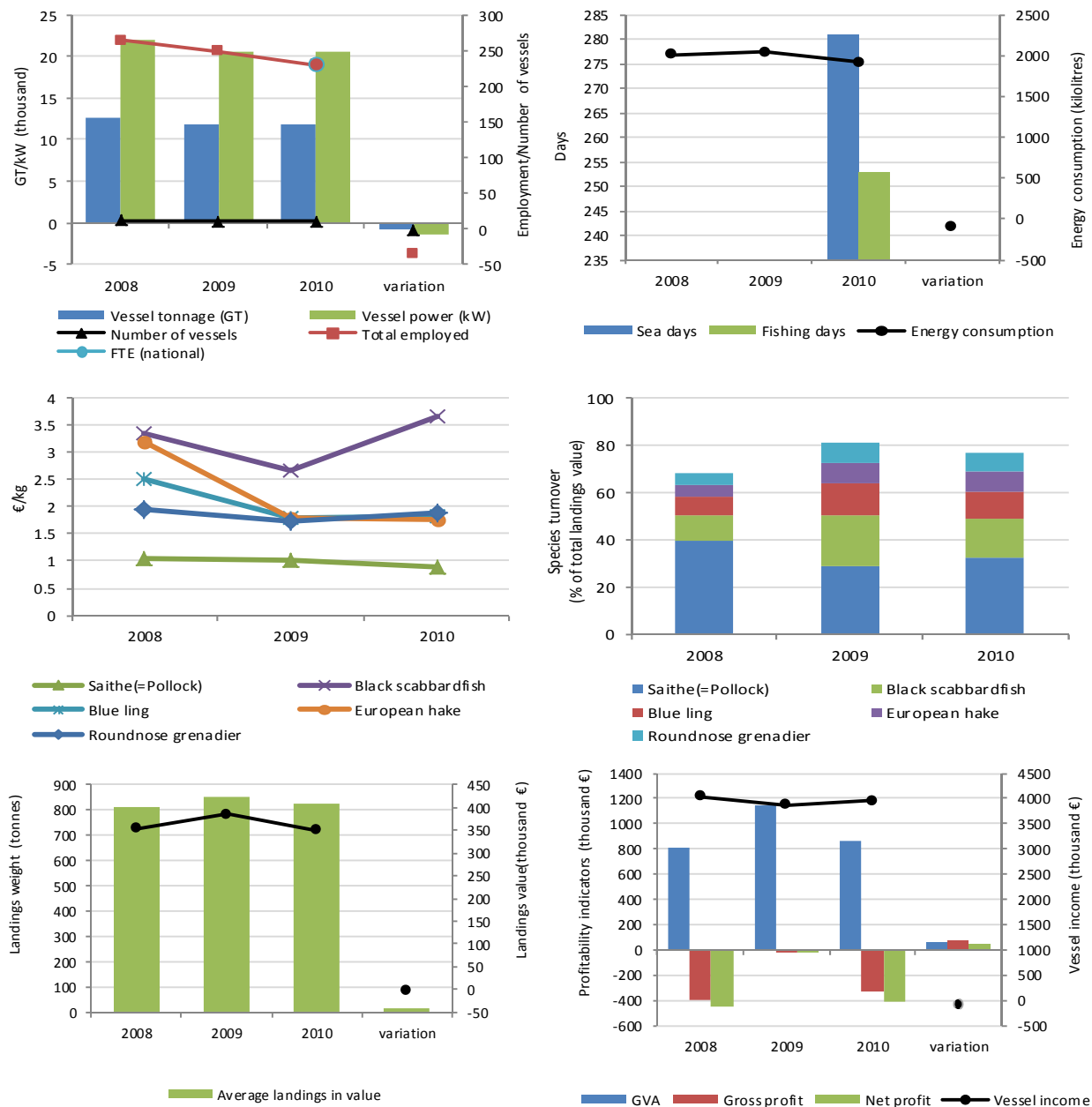


Figure 5.7.7 Key indicators for the average vessel in the France DTS VL40XX fleet segment 2008-2011: top left – fleet segment capacity and employment; top right – average fishing activity and effort; middle left – average prices (€/kg) for key species; middle right - turnover as a percentage of total value of landings for key species; bottom left – average landings in value and weight; bottom right – main economic performance indicators for the average vessel (variation 2010-2008)

(Source: EU Member States DCF data submissions)

#### **5.7.5 Assessment for 2011 and 2012**

The year 2010 was better in term of activity, with an average increase in fish prices and improvement in exports. However, results differ between fleet segments and supra regions (e.g. a good year for cephalopods in the Atlantic, bad year for pelagic fish in the Mediterranean, etc). The beginning of year 2011 was also rather good, in terms of stock abundance and species prices. However, the problem of rising fuel prices reappeared and will again have a direct negative impact on vessel profitability.

#### **5.7.6 Data issues**

Changes in data source and methodology were implemented in 2010, hence, a break in the data series should be taken into account.

Incomplete data sets, in particular at the fleet segment level. Forecast projections for 2011 not possible due to missing data.



## 5.8 GERMANY

### 5.8.1 National fleet structure

The German fishing fleet contains a small number of fishing vessels representing the pelagic fleet. These vessels are owned by a reduced number of companies. For confidentiality reasons it is impossible to publish this data by segment. On the other hand, clustering is not feasible as vessels have unique characteristics which would completely bias “pure” segments when clustered. Therefore, the pelagic fleet data were reported and not published in this report except for capacity data, which is public. This has to be born in mind when interpreting national totals. They exclude the pelagic fleet which stands for a substantial part of costs and earnings in the German fleet.

On 1 January 2012 the German fishing fleet consisted of 1585 registered vessels, with a combined gross tonnage of 65 thousand GT, total power of 150 thousand kW and an average age of 28 years (Table 5.8.1). The size of the German fishing fleet followed a decreasing trend between 2008 and 2012. The number of vessels declined by 15% (or 285 vessels), while the GT and kW of the fleet declined by 6% and 7%, respectively during the same period (fig. 5.8.1).

Table 5.8.1 German national fishing fleet key indicators: 2008-2012

	2008	2009	2010	2011	2012	% change
<b>Capacity</b>						
Number of vessels	1870	1818	1766	1677	1585	-15.2
Average vessel age	27	28	28	29	28	3.7
Gross Tonnage (GT, thousand)	69.1	61.3	68.2	67.7	64.8	-6.1
Power (kW, thousand)	160.8	155.8	161.5	159.4	149.6	-6.9
<b>Effort</b>						
Days at sea (thousand)	137.5	127.6	115.3	106.8		-22.3
Fishing days (thousand)	142.0	132.4	112.9	110.1		-22.5
Energy consumption (Million litres)	54.3	47.6	46.5			-14.4
<b>Employment</b>						
Total Employed	1665	1415	1639			-1.6
FTE	1537	1142	1276			-17.0
<b>Landings</b>						
Weight (thousand tonnes)	117.0	117.7	92.2	97.3		-16.8
Value (Million €)	163.6	128.4	141.1	154.7		-5.4

(Source: EU Member States DCF data submissions)

There is a specific reason for the decline during 2011. In that year there was an exceptional permission to permanently transfer fishing quotas from one vessel to another, given that the vessel without quota would leave the fleet. This option was widely used, mainly for the transfer of cod quotas. Another important reason for the decrease in fleet size is that several beam trawlers went out of business due to both retirement of fishermen and unfavourable brown shrimp price trends, which are their main source of income and without alternative sources of income due to a lack of quota.

The number of fishing enterprises in the German fleet totalled 1136 in 2011. The majority of fishing enterprises, 71%, owned a single vessel and 28% of enterprises owned two to five fishing vessels. Only 11 fishing enterprises owned six or more fishing vessels. In most cases the enterprises with several

vessels own small vessels using passive gear. The pelagic sector is basically owned by one parent company.

Total employment in the German fleet in 2010 was estimated at 1639 jobs and 1276 FTEs. The level of employment slightly decreased between 2008 and 2010, with the total number of employed decreasing by 2% and the number of FTEs decreasing by 17% over the time period (Table 5.8.1; fig. 5.8.1).

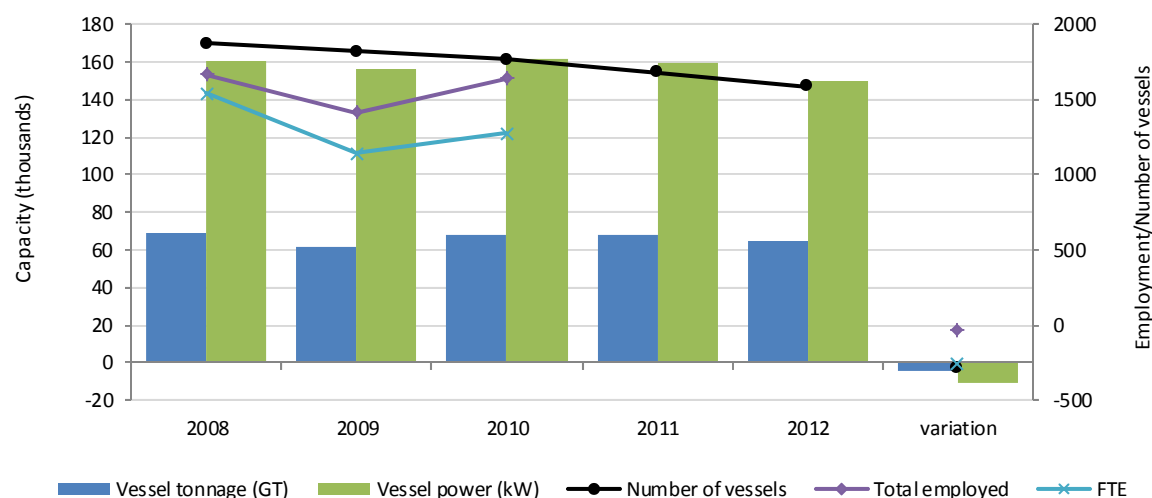


Figure 5.8.1 German national fleet capacity and employment trends: 2008-2012  
(Source: EU Member States DCF data submissions)

## 5.8.2 National fleet fishing activity and output

In 2011 the German fishing fleet spent a total of around 107 thousand days at sea. The total number of days at sea declined around 15% between 2008 and 2011. The total quantity of fuel consumed in 2010 was 46 million litres, a decrease of around 15% between 2008 and 2010 (Table 5.8.1; fig. 5.8.2, left).

The total live weight of landings achieved by the German fleet (excluding pelagic trawlers) in 2011 was 97 thousand tonnes of seafood. The total volume of landings has declined between 2008 and 2011, but slightly increased in 2011 (fig. 5.8.2, right).

In 2010, common shrimp accounted for the highest value of landings by the German non-pelagic fleet (€40.3 million), followed by cod (€27.3 million) and then Greenland halibut (€18.2 million) (fig. 5.8.3, top). The five top species represented 69% of the total landings value by the non-pelagic German fleet in 2010.

In terms of landings composition of the non-pelagic fleet in 2010, cod was the most landed species in terms of volume (19 thousand tonnes), followed by common shrimp (18 thousand tonnes), saithe (13 thousand tonnes) and Atlantic herring (11 thousand tonnes) (fig. 5.8.3, bottom). The top five species in volume represented around 74% of the total landings in weight by the non-pelagic German fleet in 2010.

This overview refers to the top species in value and volume of landings in 2010. However, it is worthwhile mentioning that in 2011, both the volume and value of blue mussel landings skyrocketed to 19 thousand tons and 29 million €, respectively.

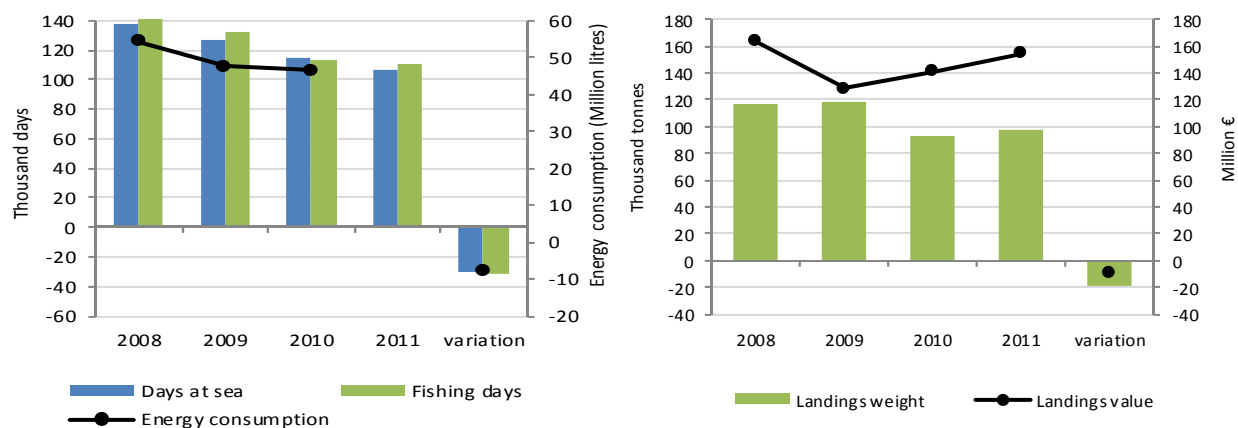


Figure 5.8.2 German national fleet fishing effort (left) and landings trends (right):2008-2011  
(Source: EU Member States DCF data submissions)

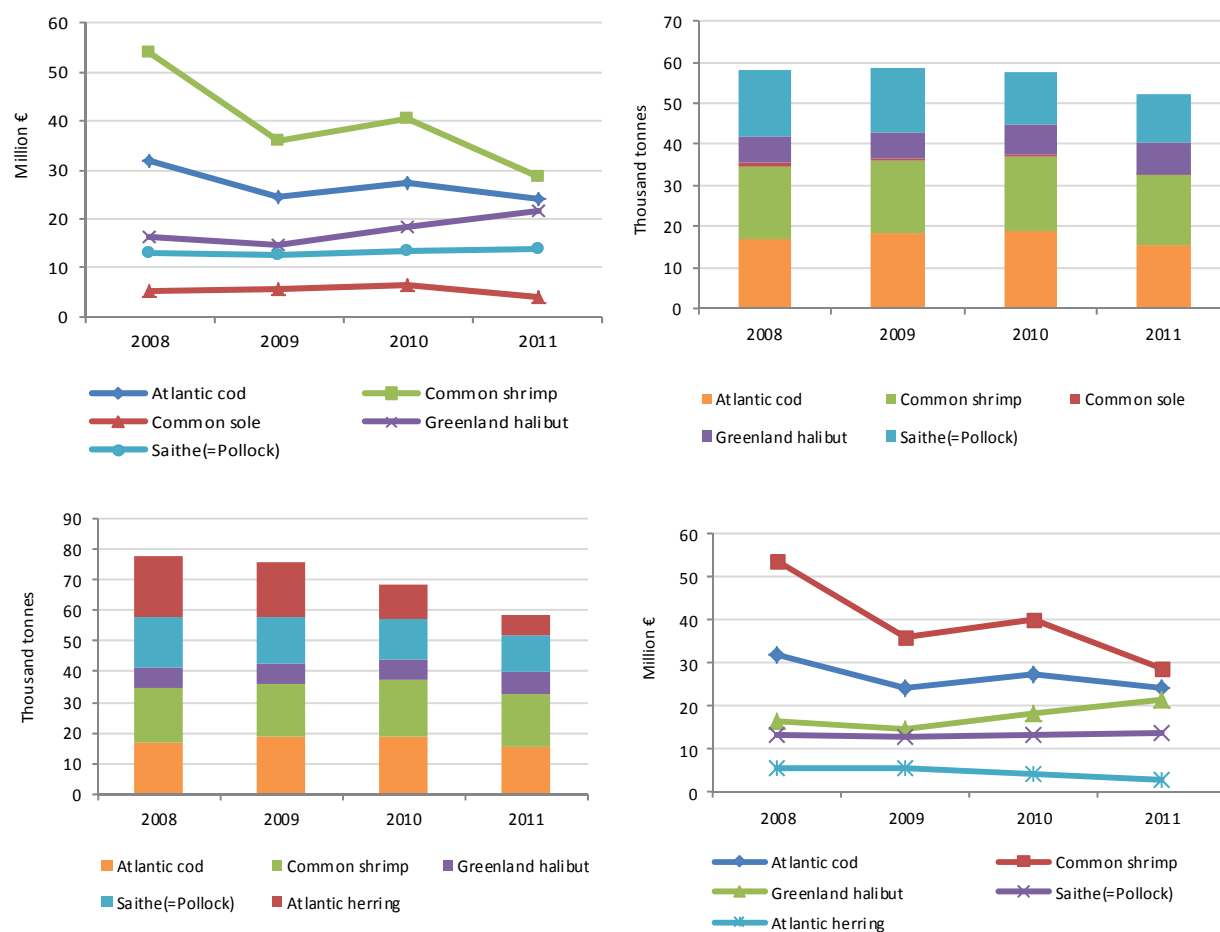


Figure 5.8.3 German national fleet total landings by key species in value (top) and weight (bottom), with corresponding weights and values:2008-2011  
(Source: EU Member States DCF data submissions)

The prices obtained for the key species in value declined considerably for cod and in particular for common shrimp between 2008 and 2011, whereas prices for saithe and Greenland halibut in tendency increased. The common shrimp market continued to suffer from a buyers' oligopoly and high supplies. The price for saithe increased thanks to MSC certification of that fishery. Of these four species, in 2011 Greenland halibut achieved the highest average price per kilo (€2.56 per kg), followed by the common shrimp (€2.25 per kg) and cod (€1.55 per kg) (fig. 5.8.4, left). Common shrimp accounted for almost 30% of total species turnover followed by Atlantic cod at around 20% of the total landings value in 2010 (fig. 5.8.4, right).

The per capita consumption of fish has decreased in Germany from about 16kg/a to 15kg/a. Although the German fleet supplies only about 1/6 of the fish consumption, these circumstances are not favourable to achieve higher prices at first sale.

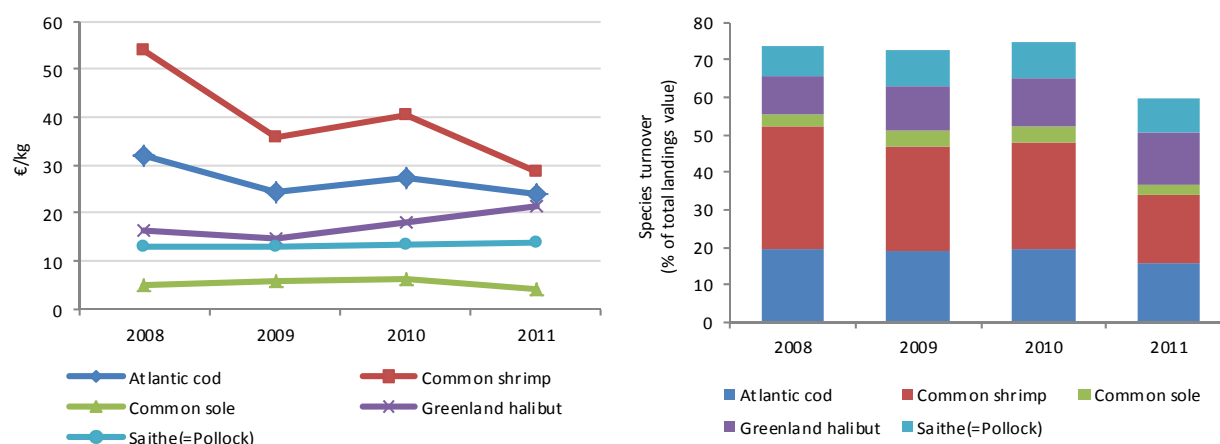


Figure 5.8.4 Total average price (left) and turnover as a percentage of total value of landings (right) for the five key species landed by the German national fleet: 2008-2011  
(Source: EU Member States DCF data submissions)

### 5.8.3 National fleet economic performance

The total amount of income generated by the German national fleet (excluding pelagic trawlers) in 2010 reached €145 million. This consisted of €140 million in landings values, €4.6 million in non-fishing income, and €1.3 million in direct subsidies (Table 5.8.2). Fishing rights are not a source of income for the German fleet. The total income of the non-pelagic German fleet decreased 13% between 2008 and 2010 (fig. 5.8.5), although total income increased from 2009 to 2010.

Total expenditure by the German non-pelagic fleet in 2010 was estimated at €105.7 million, amounting to 76% of total income. The largest expenditure items were crew wages (€37.5 million, not taking into account unpaid labour) and fuel costs (€23.3 million) (Table 5.8.2). Between 2008 and 2010, the total expenditure of the German non-pelagic fleet decreased by about 18% due to decreases in fuel prices, fuel consumption and lower variable and non-variable costs.

Table 5.8.2 German national fishing fleet economic performance indicators: 2008-2011.

Forecast figures for 2011 are highlighted in blue and values are also presented as a percentage of total income (shaded grey columns)

	2008	As % of total income	2009	As % of total income	2010	As % of total income	2011	As % of total income	% change (2010-08)
<b>Income (Million €)</b>									
Landings income	163.0	97.6%	127.6	96.5%	139.8	96.0%	149.6	96.6%	-14.2%
Direct subsidies	0.9	0.5%	1.2	0.9%	1.3	0.9%	1.2	0.8%	46.5%
Other income	3.2	1.9%	3.4	2.6%	4.6	3.1%	4.0	2.6%	45.0%
Fishing rights income	0	0%	0	0%	0	0%	0	0%	
<i>Total Income</i>	167.0	100%	132.2	100%	145.7	100%	154.8	100%	-12.8%
<b>Expenditure (Million €)</b>									
Crew wages	31.8	19.1%	34.7	26.2%	34.0	23.3%	39.4	25.5%	6.9%
Unpaid labour	11.3	6.8%	9.3	7.1%	9.5	6.5%	10.4	6.7%	-16.0%
Energy costs	29.4	17.6%	20.0	15.2%	23.3	16.0%	25.8	16.7%	-20.8%
Repair costs	21.8	13.0%	19.2	14.5%	19.1	13.1%	17.7	11.5%	-12.1%
Variable costs	25.8	15.5%	13.0	9.9%	11.1	7.6%	10.3	6.6%	-57.1%
Non-variable costs	20.2	12.1%	15.8	12.0%	14.7	10.1%	14.0	9.0%	-27.1%
Rights costs	0	0%	0	0%	0	0%	0	0%	
<i>Total operating costs</i>	140.3	84.0%	112.1	84.8%	111.7	76.7%	117.6	76.0%	-20.4%
Depreciation costs	25.1	15.0%	14.1	10.7%	12.0	8.3%	13.1	8.5%	-52.1%
Opportunity costs of capital	1.8	1.1%	4.1	3.1%	1.7	1.2%	2.5	1.6%	-2.1%
<b>Performance Indicators (Million €)</b>									
Gross value added (GVA)	68.9	41.3%	63.0	47.6%	76.2	52.3%	85.8	55.4%	10.5%
Gross profit	25.8	15.4%	19.0	14.3%	32.7	22.4%	35.9	23.2%	26.7%
Net profit (incl. subsidies)	-0.2	-0.1%	2.0	1.5%	20.2	13.9%	24.1	15.5%	8685%
Net profit (excl. subsidies)	-1.1	-0.7%	0.8	0.6%	18.9	13.0%	22.8	14.8%	1826%
<b>Capital value (Million €)</b>									
Fleet depreciated replacement value	153.6	92.0%	134.6	101.8%	113.4	77.8%	124.0	80%	-26.2%
Investments	20.6	12.3%	24.7	0.2	21.5	14.8%			4.7%
Financial position (%)	36		53		77				113.9%

(Source: EU Member States DCF data submissions)

In terms of profitability, the total amount of GVA, gross profit and net profit (excluding subsidies) generated by the German non-pelagic fleet in 2010 was €71.6 million, €32.7 million and €18.9 million, respectively (Table 5.8.2; fig. 5.8.5). In 2010, the German non-pelagic fleet had an estimated fleet capital value of €113 million and investments totalling €21.5 million.

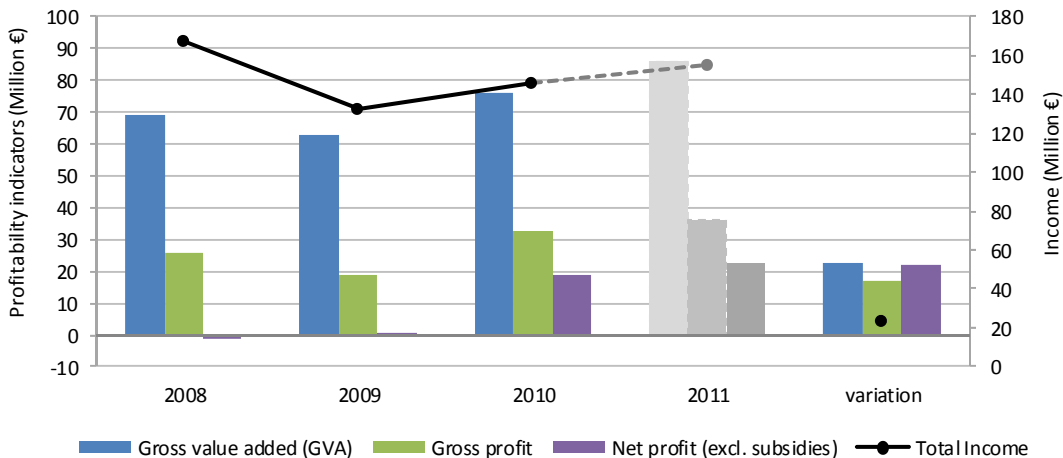


Figure 5.8.5 German national fishing fleet economic performance trends: 2008-2011  
(Source: EU Member States DCF data submissions)

#### 5.8.4 Fleet composition

The German fleet consisted of 25 fleet segments in 2010. The German fleet is highly diversified with a broad range of vessel types targeting different species predominantly in the North Sea, Baltic Sea, Eastern Arctic and North Atlantic. The pelagic fleet also partly operated in the Pacific and Moroccan waters. Beam trawlers and dredgers operate exclusively in the coastal North Sea, whereas almost all smaller vessels using fixed gear operate in the Baltic Sea. Smaller demersal trawlers mainly fish in the Baltic Sea, while larger ones (>30m) fish in the North Sea, Eastern Arctic and Greenland waters. There were 497 inactive vessels distributed throughout all length classes. These vessels are classified as inactive if they did not report any catch in 2010. Three of the active, non-pelagic segments made losses in 2010 while 19 made an overall profit. It has to be born in mind that the economic variables in Table 5.8.3 are displayed for clustered segments.

Table 5.8.3 provides a breakdown of key performance indicators for all German fleet segments in 2010. A short description of the two most important segments in terms of total value of landings is provided below.

**Beam trawlers – TBBVL1218** – 127 vessels make up this segment (2011) and are based exclusively in the North Sea coastal area. These vessels target brown shrimp almost exclusively (about 99% of turnover), with some negligible amount of by-catch of common sole, cod and turbot. The value of landings totalled €23.6 million in 2010 and dropped considerably to 16.4 in 2011. An estimated number of 157 fishermen were employed in this fleet segment in 2010, contributing to 17% of the total income from landings (excluding pelagic landings) and about 10% of the total jobs generated by the German fishing fleet, respectively. This fleet segment was profitable, with reported profits of around €2.8 million in 2010 (fig. 5.8.6).

**Large demersal trawlers – DTSVL40XX** - 8 vessels make up this segment (2010 and 2011) and operate predominantly in the North Sea, North Atlantic, Eastern Arctic and Western parts of the Baltic Sea. The fleet targets a variety of species, such as Greenland halibut, cod, saithe and haddock. In 2011 there were also some mentionable landings of redfish and northern shrimp. The total value of landings was €41.3 million (2011: €44.0 million). An estimated number of 166 fishermen were employed in this fleet segment in 2010, contributing to 29% of the total income from non-pelagic landings and about 10% of

the total jobs generated by the German fishing fleet, respectively. This fleet segment was profitable, with reported profits of around €1.5 million in 2010 (fig. 5.8.7).

Table 5.8.3 German national fishing fleet composition and key indicators at fleet segment level for 2010

Fleet Segment	Number of vessels	Vessel tonnage (GT)	Vessel power (kW)	Total employed	FTE (national)	Days at sea	Energy consumption (kilolitres)	Landings weight (tonnes)	Landings value (thousand €)	Direct Subsidies (thousand €)	GVA (thousand €)	Gross profit (thousand €)	Net profit (excl. subsidies) (thousand €)	Net Profit (incl. subsidies) (thousand €)	Clusters
<b>DFN</b>	<b>19</b>	<b>1269</b>	<b>3935</b>	<b>114</b>	<b>81</b>	<b>2908</b>	<b>1365</b>	<b>2385</b>	<b>8622</b>	<b>62</b>	<b>5651</b>	<b>4195</b>	<b>3669</b>	<b>3731</b>	
VL1218	12	273	1666	16	13	1159	70	808	2012	57	1705	673	560	617	
VL1824	2	119	352												
VL2440	5	877	1917	98	68	1749	1295	1577	6610	5	3945	3522	3109	3114	DFNVL2440*
<b>DRB</b>	<b>7</b>	<b>1638</b>	<b>4147</b>	<b>1</b>	<b>1</b>	<b>183</b>	<b>460</b>	<b>3176</b>	<b>2462</b>	<b>4</b>	<b>1642</b>	<b>811</b>	<b>67</b>	<b>71</b>	
VL1218	1	53	252												
VL2440	4	842	2626	1	1	183	460	3176	2462	4	1642	811	67	71	DRBVL2440*
VL40XX	2	743	1269												
<b>DTS</b>	<b>107</b>	<b>20914</b>	<b>40982</b>	<b>407</b>	<b>316</b>	<b>14063</b>	<b>25324</b>	<b>56707</b>	<b>73804</b>	<b>395</b>	<b>40187</b>	<b>15870</b>	<b>8121</b>	<b>8516</b>	
VL0010	1	12	80												
VL1012	15	244	2202	8	7	1372	310	1690	1030	17	523	240	146	164	DTSVL1012*
VL1218	37	1239	6767	35	29	3735	1324	5926	3353	166	2267	781	378	544	
VL1824	30	3215	6525	75	61	4213	3562	8847	10593	154	6684	3261	2057	2211	
VL2440	16	3431	6821	66	53	2703	3970	13145	17497	57	10057	5276	4036	4092	
VL40XX	8	12773	18587	223	166	2040	16157	27099	41330	0	20656	6311	1504	1504	
<b>FPO</b>	<b>2</b>	<b>223</b>	<b>661</b>												
VL1218	1	24	220												
VL2440	1	199	441												DFNVL2440*
<b>PG</b>	<b>902</b>	<b>2490</b>	<b>23353</b>	<b>804</b>	<b>619</b>	<b>70317</b>	<b>1003</b>	<b>7872</b>	<b>7736</b>	<b>302</b>	<b>3441</b>	<b>1462</b>	<b>484</b>	<b>786</b>	
VL0010	830	1700	17231	756	579	63694	697	4823	5300	100	2523	1494	800	900	
VL1012	72	790	6122	48	40	6623	307	3049	2436	202	918	-32	-316	-114	
<b>TBB</b>	<b>223</b>	<b>10511</b>	<b>48470</b>	<b>313</b>	<b>259</b>	<b>27813</b>	<b>18299</b>	<b>22104</b>	<b>48490</b>	<b>500</b>	<b>25251</b>	<b>10343</b>	<b>6587</b>	<b>7087</b>	
VL0010	10	36	451	9	7	1321	110	251	610	0	322	211	161	161	TBBVL1012*
VL1012	6	74	575												
VL1218	134	4075	24620	157	131	16429	6914	11028	23649	237	13651	5096	3616	3853	
VL1824	61	3516	13018	97	81	8243	5310	6455	14584	232	7925	2934	1628	1860	
VL2440	10	2019	7585	50	40	1820	5965	4369	9647	31	3353	2102	1181	1212	TBBVL2440*
VL40XX	2	791	2221												
<b>TM</b>	<b>9</b>	<b>27871</b>	<b>25448</b>												
VL1824	2	239	442												
VL2440	2	831	1469												TMVL40XX
VL40XX	5	26801	23537												
Cluster Name Clustered fleet segments															
TBBVL1012*	TBB VL0010	TBB VL1012													
TBBVL2440*	TBB VL2440	TBB VL40XX													
DTSVL1012*	DTS VL0010	DTS VL1012													
DRBVL2440*	DRB VL1218	DRB VL2440	DRB VL40XX												
TMVL40XX*	TM VL1012	TM VL1824	TM VL2440	TM VL40XX											
DFNVL2440*	DFN VL1824	DFN VL2440	FPO VL1218	FPO VL2440	HOK VL1218	HOK VL1824	HOK VL2440	PGO VL1218	PGO VL1824						

(Source: EU Member States DCF data submissions)

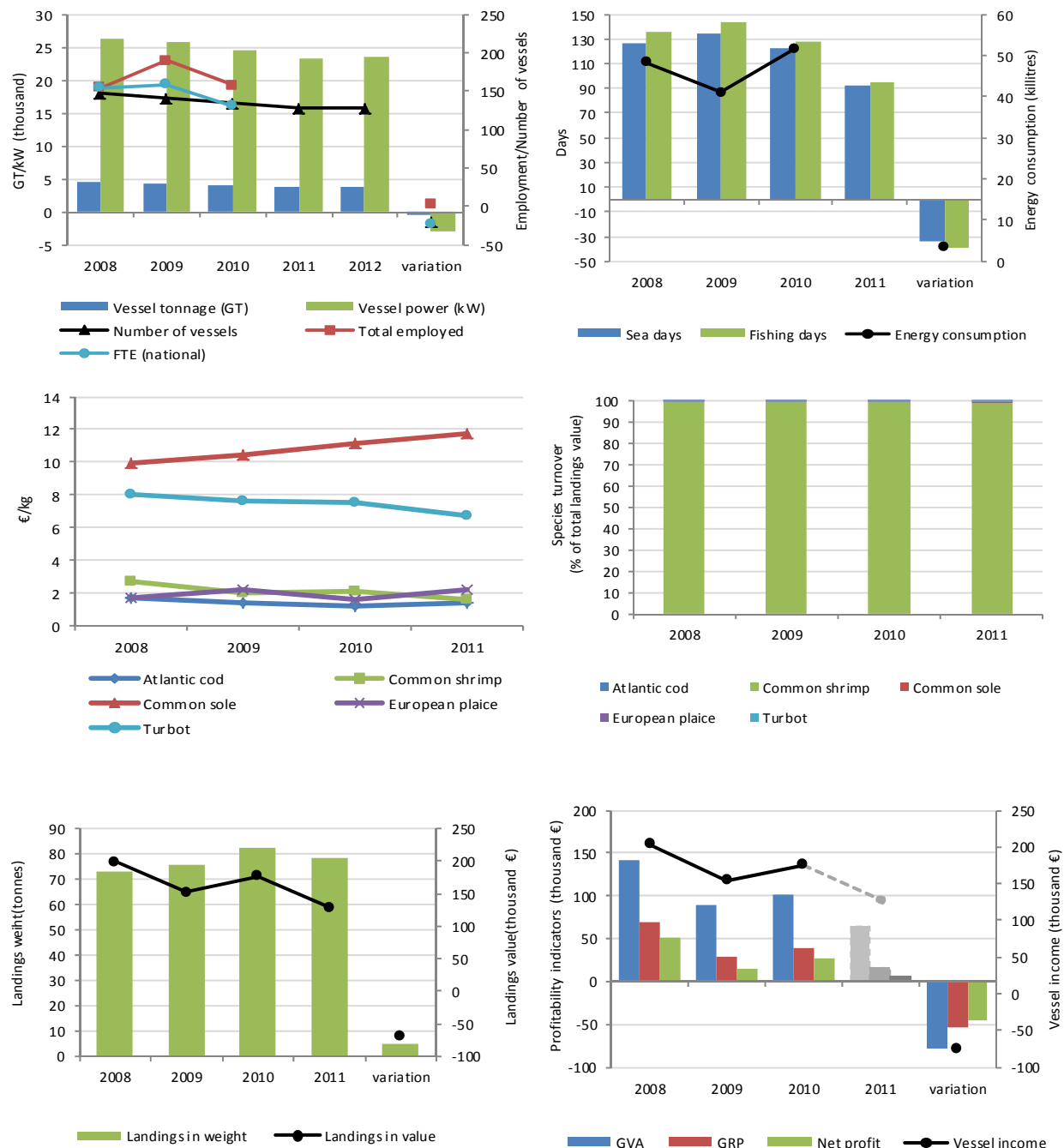


Figure 5.8.6 Key indicators for the average vessel in the German TBB VL1218 fleet segment, 2008-2011: top left – fleet segment capacity and employment; top right – average fishing activity and effort; middle left – average prices (€/kg) for key species; middle right - turnover as a percentage of total value of landings for key species; bottom left – average landings in value and weight; bottom right – main economic performance indicators for the average vessel (variation 2010-2008)

(Source: EU Member States DCF data submissions)



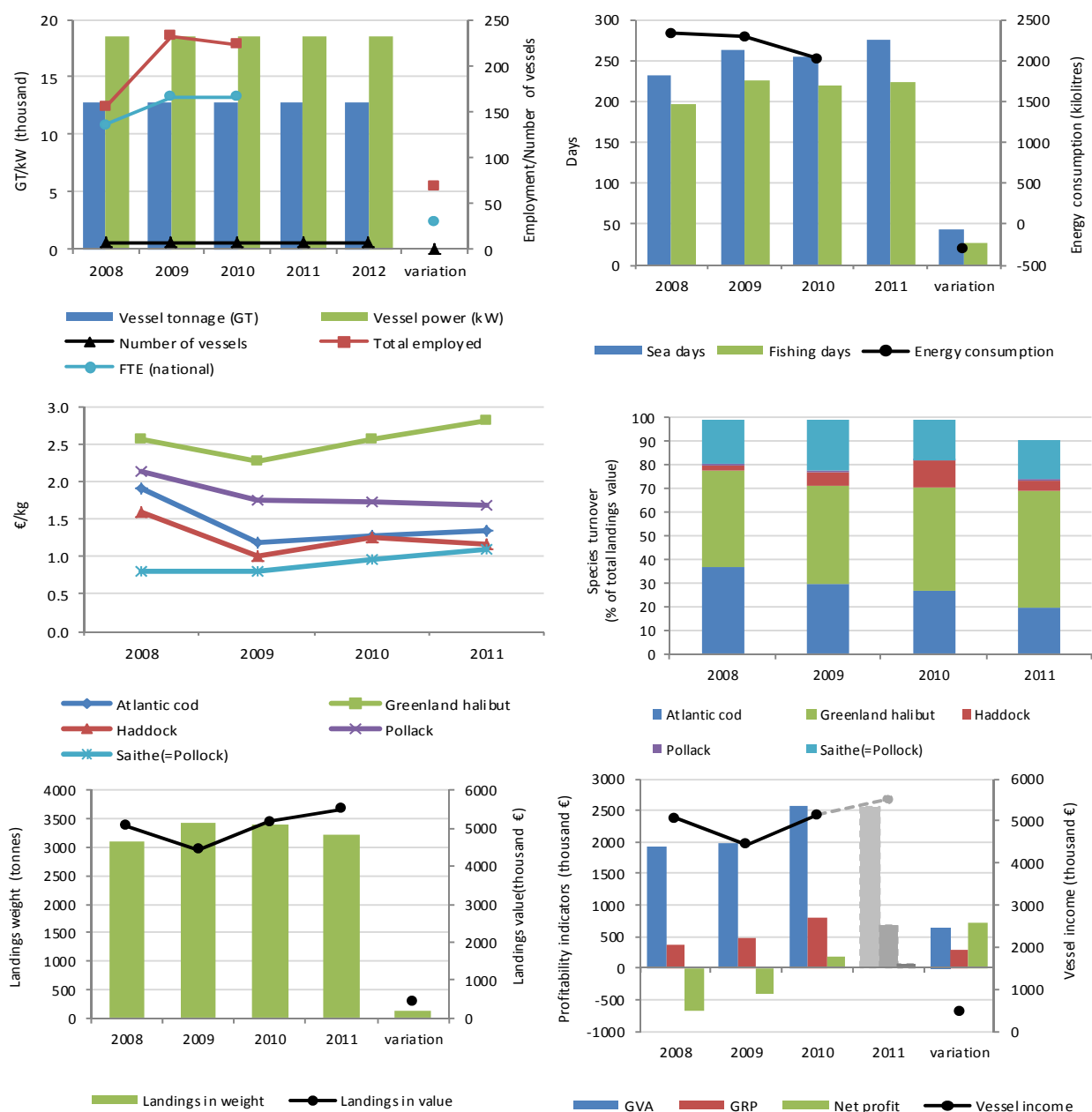


Figure 5.8.7 Key indicators for the average vessel in the German DTS VL40XX fleet segment 2008-2011: top left – fleet segment capacity and employment; top right – average fishing activity and effort; middle left – average prices (€/kg) for key species; middle right - turnover as a percentage of total value of landings for key species; bottom left – average landings in value and weight; bottom right – main economic performance indicators for the average vessel (variation 2010-2008)

(Source: EU Member States DCF data submissions)

### **5.8.5 Assessment for 2011 and 2012**

As landings are grossly the dominant source of income, the turnover of the German non-pelagic fleet in 2011 as comprehensively presented in 5.8.2 is almost identical to fleet income in 2011. Both volume and value of landings increased, but it has to be born in mind that 2010 results were quite low compared to previous years.

Overall capacity of the German fleet has continued to follow a declining trend in 2011 and 2012, as well as total effort spent in 2011 (see table 5.8.1). It is therefore to be expected that most cost items will be further lowered as well. For several TAC-regulated species, which are important to the German fleets (North Sea herring, plaice, whiting and haddock, Baltic cod), quotas have been increased. The favourable stock development has been related to long term management plans coming into effect. On the other hand, drops in prices have been experienced, as the market appears not to be easily receptive for additional supplies. This applied particularly to plaice and common shrimp, but also to cod. On the other hand, the price for herring remained rather stable. The Eastern Baltic cod fishery has been MSC certified, and the approval process for Baltic herring as well as for brown shrimp is in progress. According to previous experience the certification has paid off in higher prices, exceeding the cost for certification.

Considerable effort is spent on reducing costs, mainly fuel. Vessels try to optimise the trawling speed, thus consuming less fuel. Pulse beam trawls are being investigated for the brown shrimp fishery. A pilot project on energy savings with respect to on board equipment (shrimp boiler, heating, drag reduction) has shown promising results. It can be expected that the implementation of these measures will lead to further decreases in fuel consumption.

Fishing effort is going to continue to decrease, which is going to reduce variable costs. In 2011, several vessels were scrapped as there was an extraordinary permission to permanently transfer quota from one vessel to another without the obligation to keep both vessels operable. If the price development for brown shrimp continues to be detrimental for the fishing enterprises involved in that fishery, it is likely that more vessels are going to go out of business. This was evident in 2011 when the price per kg dropped from €2.20 in the previous year to €1.67 and the total turnover from brown shrimp dropped from €40 million to €28.5 million.

### **5.8.6 Data issues**

Capacity, logbook and landings data are derived from sources which are covered by different legislations. All these data are available exhaustively. That means, all capacity, landings and effort data are represented at 100%. The only exception is the group of vessels <8m without logbook obligation. These vessels are sampled for effort data. The remaining variables (cost, employment, fuel consumption) are estimated based upon results from an accountants' network and from surveys with questionnaires.

The data basis for fleet segment level estimations has been further improved. All fleet segments with major contribution to the total catches of the German fleet have been sampled with high response rates. As segments are not necessarily homogeneous, the results can be quite variable which is reflected in higher coefficients of variation. Some leaps in time series might be due to an improvement in data coverage, the latest data being most reliable, as the raising procedure is based upon more information. The improvement of the estimation procedure is an ongoing process.

All data except for capacity for the pelagic fleet have been collected but not reported during the data call for confidentiality reasons. As in previous years, this affects regional analyses. The pelagic fleet

mainly operates in the North Sea and North Atlantic (herring, mackerel, blue whiting), temporarily also in the Pacific (jack mackerel). Data on pelagic fisheries in the Baltic are not affected, as they perform on a seasonal basis, and vessels are assigned to the DTS segment, which reflects their major activity during the year.



## 5.9 GREECE

No data available



## 5.10 IRELAND

### 5.10.1 National fleet structure

In 2012 the Irish fishing fleet consisted of 2188 registered vessels, with a combined gross tonnage of 63 thousand GT and total power of 191.85 thousand kW and an average age of 26 years (Table 5.10.1). The size of the Irish fishing fleet increased between 2008 and 2012. The number of vessels increased by 12% (or 44 vessels), however the total GT and kW of the fleet declined by 11% and 7% respectively during the same period (fig. 5.10.1). National fleet data is taken from the EU Fleet Register on the 1st January for the reference year. This is inclusive of all vessels registered and does not make compensations for inactive vessels.

Table 5.10.1 Irish national fishing fleet key indicators: 2008-2012

	2008	2009	2010	2011	2012	% change
<b>Capacity</b>						
Number of vessels	1955	2026	2109	2144	2188	11.9
Average vessel age	25	24	25	25	26	4.7
Gross Tonnage (GT, thousand)	70.7	69.9	68.7	69.4	63.0	-10.9
Power (kW, thousand)	206.9	193.6	193.9	195.3	191.9	-7.3
<b>Effort</b>						
Days at sea (thousand)	48.9	48.6	53.2	n/a		8.8
Fishing days (thousand)	40.1	40.1	44.0	n/a		9.8
Energy consumption (Million litres)	129.1	108.5	79.7			-38.3
<b>Employment</b>						
Total Employed	5841	4723	4805			-17.7
FTE	4445	3069	3119			-29.8
<b>Landings</b>						
Weight (thousand tonnes)	198.0	262.6	314.2	n/a		58.7
Value (Million)	196.5	185.9	202.1	n/a		2.9

(Source: EU Member States DCF data submissions)

The total number of fishing enterprises in the IRISH fleet was 1846 in 2012. The vast majority of fishing enterprises, 88%, owned a single vessel and 12% of enterprises owned two to five fishing vessels. Only 0.1% fishing enterprises owned six or more fishing vessels. However, it is possible that vessel owners may own multiple vessels, which are registered under different company names and thus the actual number of fishing enterprises owning more than one vessel may be more.

Total employment was around 4805 jobs and 3119 FTEs in the Irish fleet in 2010. The level of employment increased between 2009 and 2010, with the total number employed increasing by 2% and the number of FTEs increasing by 1.6% over the time period (Table 5.10.1; fig. 5.10.1). Overall the level of employment decreased between 2008 and 2010, with the total number decreasing by 18%. The figures for 2010 may not be indicative due to the small sample size and may explain the high decrease between 2008 and 2010.

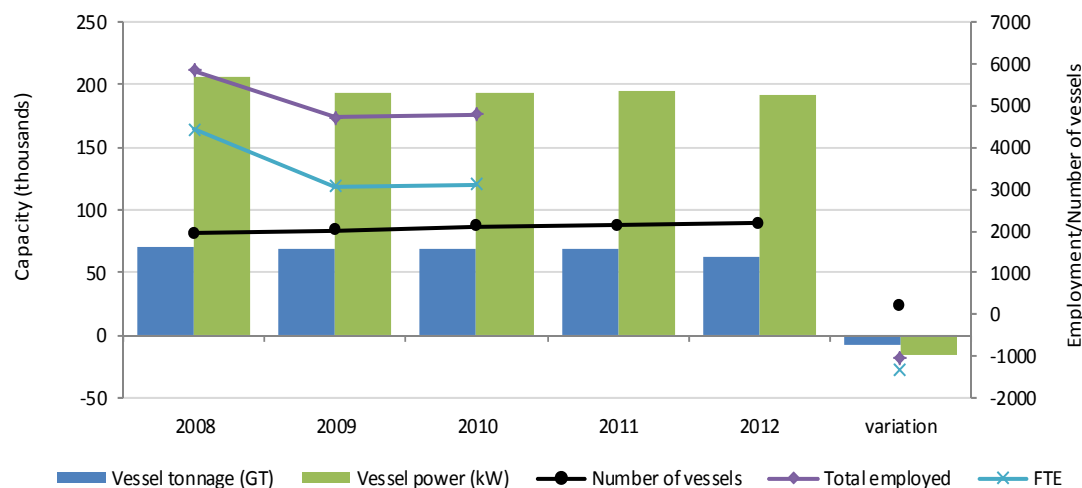


Figure 5.10.1 Irish national fleet capacity and employment trends: 2008-2012  
(Source: EU Member States DCF data submissions)

### 5.10.2 National fleet fishing activity and output

In 2010 the Irish over 10m meter fishing fleet spent a total of around 53 thousand days at sea (Table 5.10.1), 83% of which were actual fishing days. The total number of days at sea increased by around 3% between 2008 and 2011, while total fishing days increased during the same period (fig. 5.10.2, left).

The total quantity of fuel consumed in 2010 was 80 million litres, a decrease of around 38% between 2008 and 2010 (fig. 5.11.2, left). This large decrease may be a result of the lower sample size achieved in the 2010 survey which could have resulted in an underestimation of fuel costs and thus energy consumption.

The total volume of landings achieved by the Irish fleet in 2010 was 314 thousand tonnes of seafood. The total volume of landings has increased by 27% between 2008 and 2011 (fig. 5.10.2, right). This increase can be explained mostly by the increase in catches of boarfish which increased by over 68 thousand tonnes in the same period.

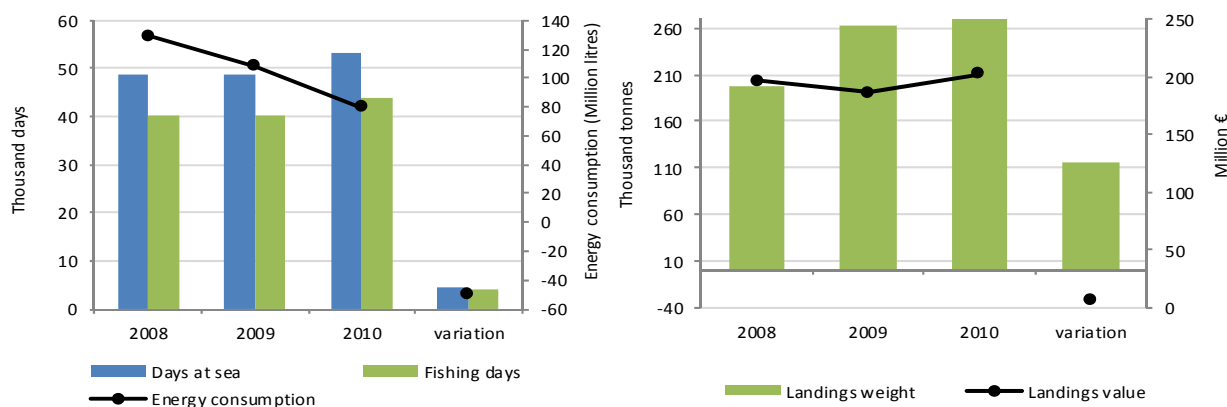


Figure 5.10.2 Irish national fleet fishing effort (left) and landings trends (right): 2008-2011  
(Source: EU Member States DCF data submissions)



In 2010 mackerel accounted for the highest value of landings (€52.5 million) by the national fleet, followed by Norway lobster (€33.9 million) and then anglerfish (€12.8 million) (fig. 5.10.3, top).

In terms of landings composition, in 2010, boarfish (boarfish and boarfishes nei) was the most common species landed in terms of volume (89 thousand tonnes), followed by Atlantic mackerel (57 thousand tonnes) and jack and horse mackerel (36 thousand tonnes) (fig. 5.10.3, bottom).

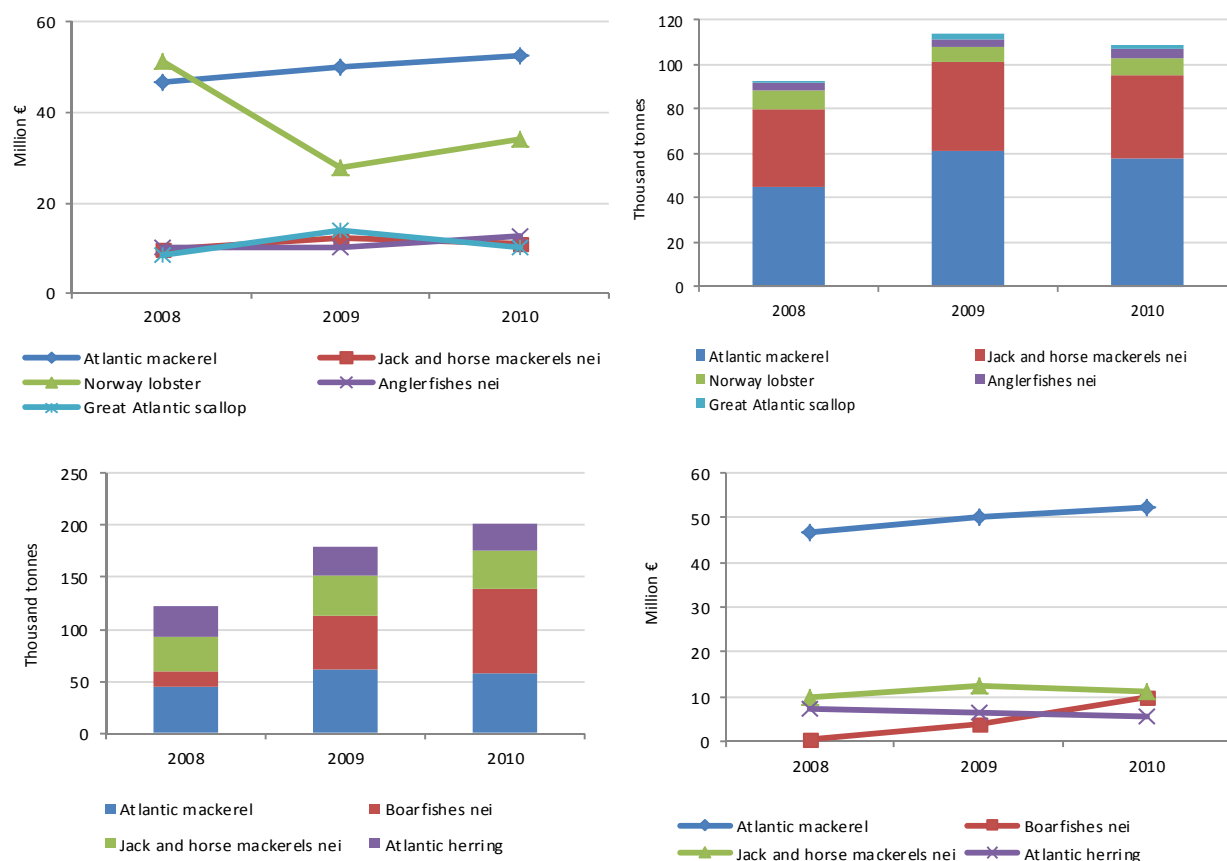


Figure 5.10.3 Irish national fleet total landings by key species in value (top) and weight (bottom) and corresponding weight and value: 2008-2011

(Source: EU Member States DCF data submissions)

In terms of prices, in 2010 Palinurid spiny lobsters achieved the highest average price per kilo by the Irish national fleet (€28.53 per kg), followed by Spiny lobster (€20.00 per kg) and Pandalus shrimps (€14.07 per kg). The prices obtained for the highest landed species, by volume, generally declined between 2008 and 2010. In terms of their prices in 2010, per kilo, these achieved the following; nephrops (€4.39 per kg), anglerfish (€3.16 per kg), mackerel (€0.91 per kg) and jack and horse mackerel (€0.30 per kg) (fig. 5.10.4). Mackerel, together with jack and horse mackerel accounted for little over than 31% of the total turnover in 2010, while Norway lobster accounted for almost 17% of species turnover, a sharp decline for 26% in 2008 (fig. 5.10.4).

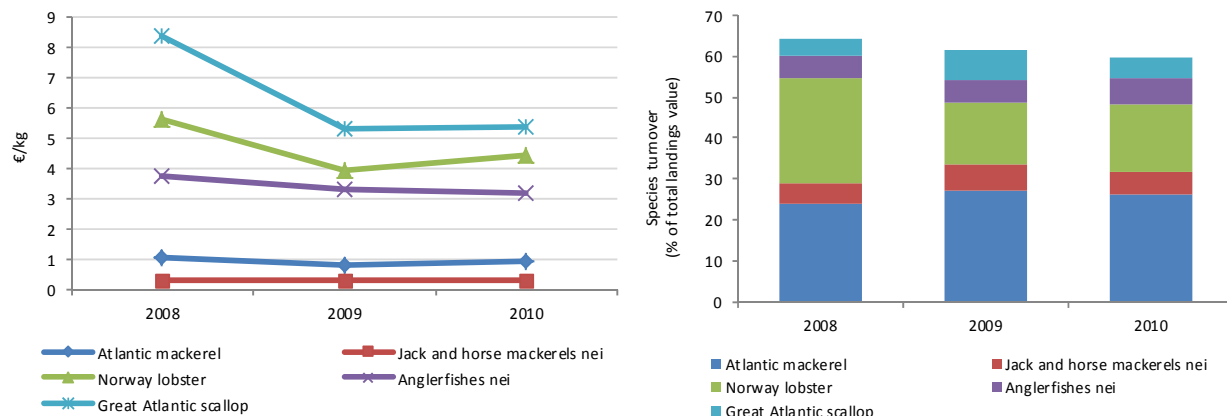


Figure 5.10.4 Total average price (left) and turnover as a percentage of total value of landings (right) for the five key species landed by the Irish national fleet: 2008-2011  
(Source: EU Member States DCF data submissions)

### 5.10.3 National fleet economic performance

The total amount of income generated by the Irish national fleet in 2010 was €308.5 million. This consisted of €298.1 million in landings values, €0 million in fishing rights sales, €9.5 million in non-fishing income, and €1 million in direct subsidies (Table 5.10.2). The total income of the Irish fleet decreased 25% between 2008 and 2010 (fig. 5.10.5).

Total expenditure by the Irish national fleet in 2010 was €229 million, amounting to 74% of total income. The largest expenditure items were crew wages (€97.8 million) and fuel costs (€42.6 million) (Table 5.10.2). Between 2008 and 2010, the total expenditure of the Irish fleet decreased by 34%, fluctuating between €352 million and €229 million, largely due to changes in fuel prices and repairs and maintenance costs. This large decrease may also be an artefact of the small sample size for the 2010 survey thus resulting of an underestimation of expenditure costs.

In terms of profitability, the total amount of Gross value added, gross profit and net loss (excluding subsidies) generated by the Irish national fleet in 2010 was €179.1 million, €78.5 million and €-18 million respectively (Table 5.10.2; fig. 5.10.5). Investments made by the Irish fleet in 2010 totalled €14.2 million.

Table 5.10.2 Irish national fishing fleet economic performance indicators: 2008-2011.

Forecast figures for 2011 are highlighted in blue and values are also presented as a percentage of total income (shaded grey columns)

	2008	As % of total income	2009	As % of total income	2010	As % of total income	2011	As % of total income	% change (2010-08)
<b>Income (Million €)</b>									
Landings income	366.1	88.9%	267.1	90.8%	298.1	96.6%	n/a	n/a	-18.6%
Direct subsidies	22.9	5.6%	16.4	5.6%	1.0	0.3%	n/a	n/a	-95.7%
Other income	22.7	5.5%	10.8	3.7%	9.5	3.1%	n/a	n/a	-58.3%
<i>Total income</i>	411.7	100%	294.3	100%	308.5	100%	n/a	n/a	-25.1%
<b>Expenditure (Million €)</b>									
Crew wages	116.0	28.2%	160.6	54.6%	97.8	31.7%	n/a	n/a	-15.7%
Unpaid labour	2.1	0.5%	2.6	0.9%	2.8	0.9%	n/a	n/a	35.0%
Energy costs	82.1	19.9%	45.3	15.4%	42.6	13.8%	n/a	n/a	-48.1%
Repair costs	40.0	9.7%	33.6	11.4%	26.4	8.6%	n/a	n/a	-33.9%
Variable costs	39.2	9.5%	23.7	8.1%	23.2	7.5%	n/a	n/a	-40.8%
Non-variable costs	73.0	17.7%	33.6	11.4%	36.3	11.8%	n/a	n/a	-50.3%
<i>Total operating costs</i>	352.3	85.6%	299.5	101.8%	229.0	74.2%	n/a	n/a	-35.0%
Depreciation costs	43.6	10.6%	39.8	13.5%	48.4	15.7%	n/a	n/a	11.1%
Opportunity cost of capital	8.9	2.2%	74.9	25.5%	48.2	15.6%	n/a	n/a	443.7%
<b>Performance Indicators (Million €)</b>									
Gross value added (GVA)	154.5	37.5%	141.6	48.1%	179.1	58.0%	n/a	n/a	15.9%
Gross Profit	36.5	8.9%	-21.6	-7.4%	78.5	25.4%	n/a	n/a	115.1%
Net profit (incl. subsidies)	7.0	1.7%	-120.0	-40.8%	-17.0	-5.5%	n/a	n/a	-344.7%
Net profit (excl. subsidies)	-15.9	-3.9%	-136.4	-46.3%	-18.0	-5.8%	n/a	n/a	-13.2%
<b>Capital value (Million €)</b>									
Investments	218.3	53.0%	18.7	6.4%	14.2	4.6%			
Financial position (%)	57.8	14.0%	73.4	24.9%	48.9	15.8%			

source: EU Member States DCF data submissions)

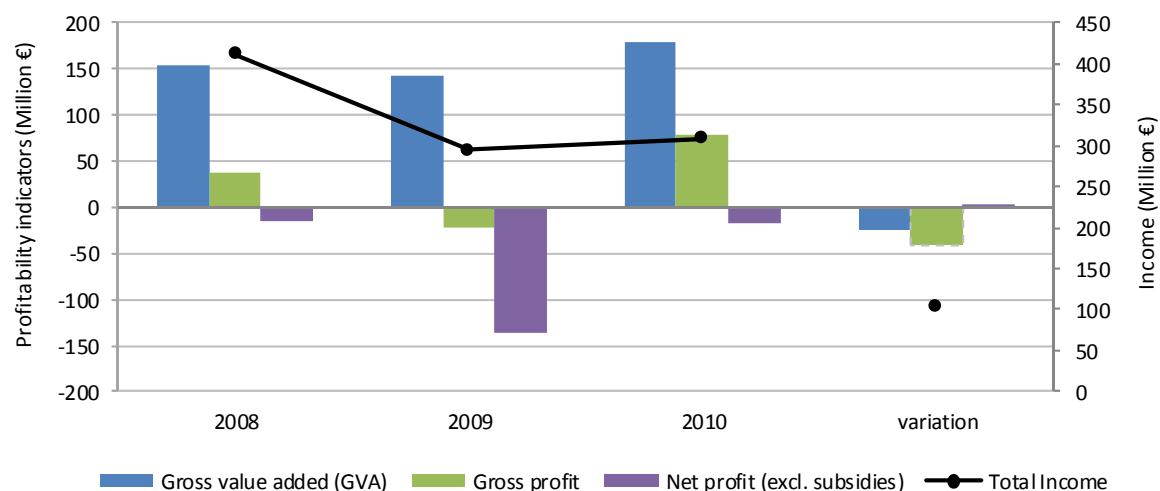


Figure 5.10.5 Irish national fishing fleet economic performance trends: 2008-2011

(Source: EU Member States DCF data submissions)

#### 5.10.4 Fleet composition

The Irish national fleet consisted of 39 fleet segments in 2010, twenty of which have been grouped into six clusters. The Irish fleet is highly diversified with a broad range of vessel types targeting different species predominantly in the VIIa, VIIb, VIIg and VIIj. There were 182 inactive vessels in the over 10m segment in 2010. These vessels are classed as inactive if they did not land any catch in 2010. For the 17 segments that have sufficient economic data to calculate profit and loss of the 7 made losses in 2010 while 7 made an overall profit. Table 5.10.3 provides a breakdown of key performance indicators for all Irish fleet segments in 2010. A short description of the five most important segments in terms of total value of landings is provided below.

**TM VL2440** – 24 vessels make up this segment and operate predominantly in VIIb, VIIj and VIIk. These vessels target pelagic species, such as Herring and Mackerel. The total value of landings was €15 million and around 115 FTEs were employed in this fleet segment in 2010, contributing to 7% and 4% of the total income from landings and FTEs generated by the Irish fishing fleet, respectively. This fleet segment made a loss of €2.5 million in 2010.

**TM VL40XX** – 20 vessels make up this segment and operate predominantly in VIa and VIIj. These vessels target pelagic species, such as Mackerel, Herring and Horse Mackerel. The total value of landings was €74 million and around 175 FTEs were employed in this fleet segment in 2010, contributing to 37% and 6% of the total income from landings and FTEs generated by the Irish fishing fleet, respectively. This fleet segment made a profit of €0.79 million in 2010 (fig. 5.10.6).

**DTS VL1824** – 64 vessels make up this segment and are based predominantly in VIa, VIIb and VIIg. These vessels target demersal species such as Nephrops, Whiting and Anglerfish. The total value of landings was €42 million and around 376 FTEs were employed in this fleet segment in 2010, contributing to 21% and 12% of the total income from landings and FTEs generated by the Irish fishing fleet, respectively. This fleet segment was unprofitable, with reported losses of around €5.24 million in 2010 (fig. 5.10.7).

**DTS VL2440** – 29 vessels make up this segment and operate predominantly in VIa, VIIb and VIIg. The fleet targets a variety of species, such as Whiting, Nephrops and Herring. The total value of landings was €23 million and around 232 FTEs were employed in this fleet segment in 2010, contributing to 11% and 7% of the total income from landings and FTEs generated by the Irish fishing fleet, respectively. This fleet segment made a loss of €2.37 million in 2010.

**FPO VL1012** – 114 vessels make up this segment and are based predominantly in the VIa, VIIb and VIIj. These vessels target mainly shellfish species such as Brown Crab, Lobster and Whelk. The total value of landings was €6.5 million and around 137 FTEs were employed in this fleet segment in 2010, contributing to 3% and 4% of the total income from landings and FTEs generated by the Irish fishing fleet, respectively. This fleet segment was profitable, with reported profits of around €6.4 million in 2010.

Table 5.10.3 Irish national fishing fleet composition and key indicators at fleet segment level for 2010

Fleet Segment	Number of vessels	Vessel tonnage (GT)	Vessel power (kW)	Total employed	FTE (national)	Days at sea	Energy consumption (kilolitres)	Landings weight (tonnes)	Landings value (thousand €)	Direct Subsidies (thousand €)	GVA (thousand €)	Gross profit (thousand €)	Net profit (excl. subsidies) (thousand €)	Net Profit (incl. subsidies) (thousand €)	Cluster
<b>DFN</b>	<b>412</b>	<b>2724.99</b>	<b>14704.9</b>	<b>716.52</b>	<b>429.91</b>	<b>3157</b>	<b>5815</b>	<b>2092</b>	<b>3864</b>	<b>103</b>	<b>10476</b>	<b>-6164</b>	<b>-10061</b>	<b>-9957</b>	
VL0010	353	834	7016					65	102						Cluster1
VL1012	43	437	3006			860		405	840						
VL1218	8	213	1048	717	430	1171	5815	400	804	103	10476	-6164	-10061	-9957	
VL1824	5	597	1532			897		1012	1754						
VL2440	3	644	2103			229		210	364						
<b>DRB</b>	<b>454</b>	<b>8269</b>	<b>31249</b>	<b>1275</b>	<b>762</b>	<b>2464</b>	<b>8185</b>	<b>4464</b>	<b>11351</b>	<b>42</b>	<b>36480</b>	<b>9274</b>	<b>-22842</b>	<b>-22800</b>	
VL0010	346	960	9064					54	184						Cluster2
VL1012	53	508	4299	1275	762	993	8185	374	1194	42	36480	9274	-22842	-22800	
VL1218	16	446	1916			233		74	238						
VL1824	6	442	1294			707		950	5057						
VL2440	29	3972	11892			484		1277	4450						
VL40XX	4	1941	2786			47		1735	228						
<b>DTS</b>	<b>203</b>	<b>18231</b>	<b>53138</b>	<b>908</b>	<b>814</b>	<b>30196</b>	<b>28802</b>	<b>37562</b>	<b>75657</b>	<b>476</b>	<b>23384</b>	<b>3055</b>	<b>-7632</b>	<b>-7157</b>	
VL0010	28	78	798					40	129	1					Cluster3
VL1012	25	338	2296			1698		585	1334						
VL1218	57	2443	9471	221	205	6940	4447	3780	8367	82	4716	2796	371	453	
VL1824	64	8740	25719	405	377	13512	13482	18425	42009	231	12747	-634	-5472	-5241	
VL2440	29	6633	14853	282	232	8046	10874	14733	23817	162	5921	892	-2531	-2368	
<b>FPO</b>	<b>839</b>	<b>4139</b>	<b>29118</b>	<b>1488</b>	<b>761</b>	<b>10665</b>	<b>8389</b>	<b>8741</b>	<b>12612</b>	<b>68</b>	<b>45626</b>	<b>35012</b>	<b>25709</b>	<b>25777</b>	
VL0010	699	1365	15596	1157	578		5584	40	59	37	34375	27385	21017	21054	Cluster4
VL1012	114	1160	9137	264	137	7648	1845	4584	6560	8	10281	8412	6429	6437	
VL1218	19	305	2023	66	45	1604	960	1117	1446	23	970	-784	-1737	-1714	
VL1824	4	619	1152			796		1119	1695						
VL2440	3	690	1210			617		1881	2852						
<b>HOK</b>	<b>37</b>	<b>865</b>	<b>2362</b>			<b>230</b>		<b>119</b>	<b>164</b>	<b>1</b>					
VL0010	27	43	539							1					
VL1012	8	71	724			230		119	164						
VL2440	2	751	1100												
<b>PGP</b>	<b>3</b>	<b>14</b>	<b>163</b>					<b>2</b>	<b>13</b>						
VL0010	1	2	38												
VL1012	2	12	125					2	13						
<b>PMP</b>	<b>3</b>	<b>93</b>	<b>371</b>	<b>6</b>	<b>3</b>	<b>372</b>	<b>26</b>	<b>363</b>	<b>351</b>	<b>0</b>	<b>87</b>	<b>87</b>	<b>51</b>	<b>51</b>	
VL0010				6	3		26				87	87	51	51	Cluster5
VL1012						224									
VL1218	3	93	371			148		363	351						
<b>PS</b>	<b>11</b>	<b>109</b>	<b>667</b>												
VL0010	7	19	141												
VL1218	4	90	526												
<b>TBB</b>	<b>16</b>	<b>1817</b>	<b>5261</b>	<b>72</b>	<b>59</b>	<b>2806</b>	<b>2898</b>	<b>2286</b>	<b>5643</b>	<b>26</b>	<b>1104</b>	<b>121</b>	<b>-1323</b>	<b>-1297</b>	
VL0010	2	17	184					1	3						
VL1012	1	18	155												
VL1824	7	744	1799			1381		937.9586	2184.552						Cluster6
VL2440	6	1038	3123	71.5	58.5	1425	2897.77	1347.245	3454.941	25.795	1103.648	120.5373	-1322.781	-1296.986	
<b>TM</b>	<b>131</b>	<b>32430</b>	<b>56895</b>	<b>340</b>	<b>292</b>	<b>3276</b>	<b>25593</b>	<b>258574</b>	<b>92455</b>	<b>280</b>	<b>61923</b>	<b>37122</b>	<b>-1944</b>	<b>-1726</b>	
VL0010	60	261	2190					150	145	2					
VL1012	18	203	1276					18	35						
VL1218	11	365	1408					709	1210	25					
VL1824	8	1115	2996					2935	1413	35					
VL2440	14	4529	9947	128	116	1108	4920	31241	15219	218	13753	6330	-2735	-2517	
VL40XX	20	25957	39078	212	176	2168	20673	223521	74432		48171	30792	791	791	

(Source: EU Member States DCF data submissions)

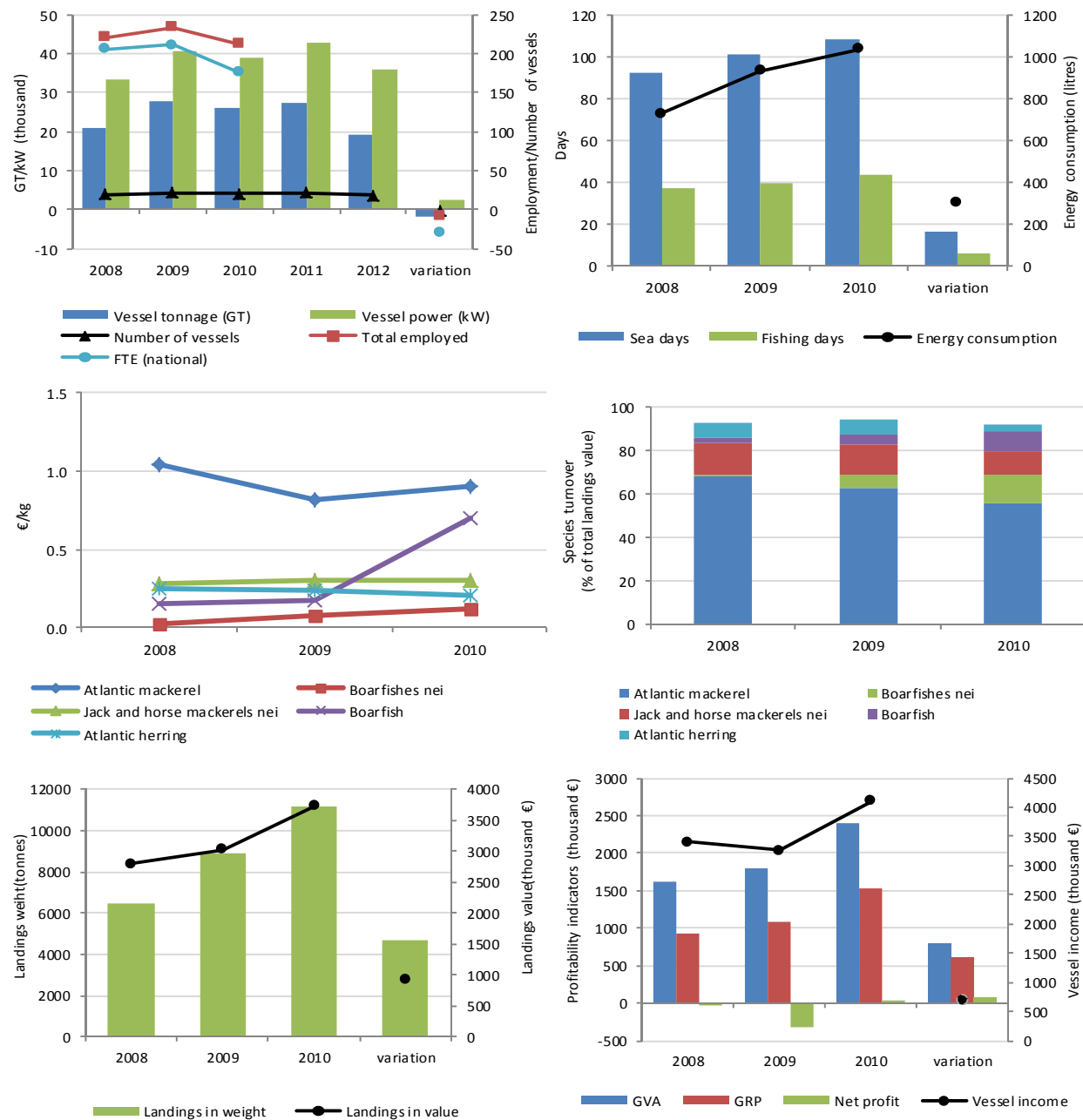


Figure 5.10.6 Key indicators for the average vessel in the Irish TM VL40XX fleet segment, 2008-2012:

top left – fleet capacity and employment; top right – fishing activity and effort; middle left – average prices (€/kg) for key species; middle right - turnover as a percentage of total value of landings for key species; bottom left - landings in value and weight; bottom right –main economic indicators for the average vessel (variation 2010-2008)

(Source: EU Member States DCF data submissions)

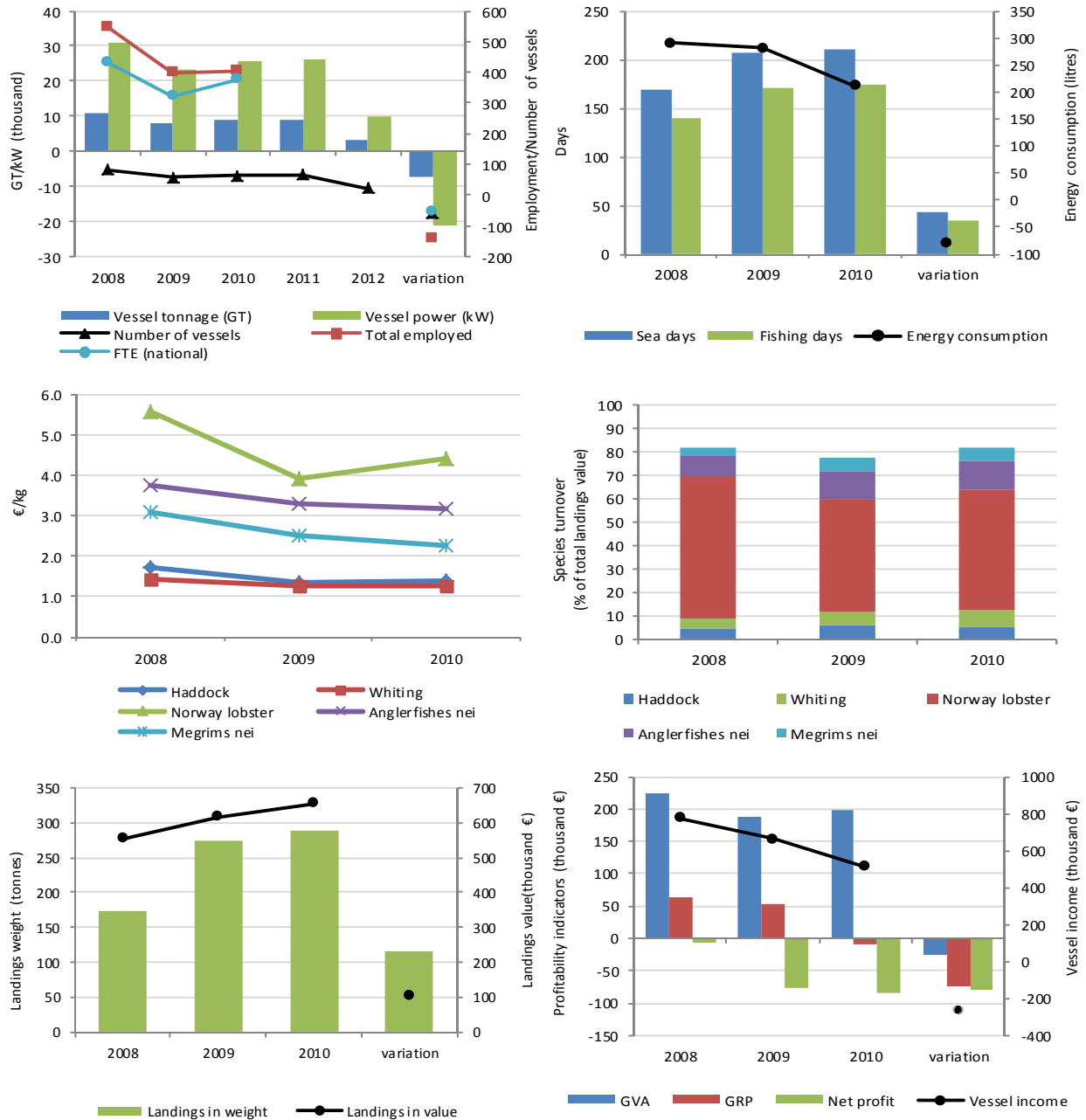


Figure 5.10.7 Key indicators for the average vessel in the Irish DTS VL1824 fleet segment 2008-2012:

top left – fleet capacity and employment; top right – fishing activity and effort; middle left – average prices (€/kg) for key species; middle right – turnover as a percentage of total value of landings for key species; bottom left – total landings in value and weight; bottom right – main economic indicators for the average vessel (variation 2010-2008)

(Source: EU Member States DCF data submissions)

### 5.10.5 Assessment for 2011 and 2012

The composition, by segment, of the Irish national fleet (i.e. >10m and <10m LOA) in 2011 and 2012 reflects that reported for 2010. No significant removals or additions to the national fleet have occurred

other than adjustments due to accidental loss and damage and occasional redundancy, particularly in the polyvalent segments <10m LOA.

The key drivers influencing the economic performance of the Irish National fleet in 2010 were low first point of sale prices returned to vessels and the increasing cost of fuel in the latter part of the year. Oil price increases have continued in 2011 and are expected to further affect the profitability of the Irish National Fleet in the future.

Segments of the fleet have sought to consolidate market share, improve market access and product prices, through collective engagement with internationally recognized certification processes. Vessels of the pelagic and polyvalent fleets targeting mackerel, achieved Marine Stewardship Council (MSC) certification in 2009 and 2010 and an internationally accredited (ISO 65), National, Seafood Stewardship Standard is available to the main segments of the Irish National fleet in 2012.

#### **5.10.6 Data issues**

The figures for days at sea and fishing days reported are for those vessels over 10 meters. The exclusion of the less than 10 meter fleet was due to the fact that this segment is not mandated to carry and complete logbooks for fishing operations. Estimates of days at sea for this segment have been calculated from a small sample of this fleet but have not been included due to the uncertainty surrounding these data.

Estimates of total days at sea for vessels under 10m LOA are 104,416 and 152,082 for 2009 and 2010, respectively.

Although the operation of the economic aspect of the data collection framework has been much improved relative to previous years, the MS sampling targets were not fully achieved in 2011 (for 2010 data). Lacking a mandatory European legislative framework to ensure compliance with DCF data requests, the MS continues to be forced to rely on the goodwill of the seafood industry to provide data on a voluntary basis.

This situation is far from ideal and as a result, survey response rates are highly variable and unpredictable. Survey target rates vary between fleet segments with a high achievement of sampling targets in a number of segments and an under-achievement of targets in other segments. There was a reduction in the response to the 2010 economic survey in comparison to 2009 and this has resulted in less accurate estimations for the 2010 variables.



## 5.11 ITALY

### 5.11.1 National fleet structure

In 2011 the Italian fishing fleet consisted of 14,714 registered vessels, with a combined gross tonnage of 185 thousand GT and total power of 1,236 thousand kW and an average age of 28,5 years (Table 5.11.1). The size of the Italian fishing fleet has followed a decreasing trend between 2008 and 2011. The number of vessels declined by 2% while the total GT and kW of the fleet declined by 7% and 3%, respectively during the same period (fig. 5.11.1).

Table 5.11.1 Italian national fishing fleet key indicators: 2008-2012

	2008	2009	2010	2011	2012	% change
<b>Capacity</b>						0
Number of vessels	15038	14977	14969	14715	n/a	-2.2
Average vessel age	27	27	28	28	n/a	6.7
Gross Tonnage (GT, thousand)	199.0	197.6	191.2	185.0	n/a	-7.0
Power (kW, thousand)	1272.8	1270.7	1118.6	1236.5	n/a	-2.9
<b>Effort</b>						0.0
Days at sea (thousand)	1590.8	1782.8	1667.8	n/a		4.8
Fishing days (thousand)	1530.1	1751.5	1646.3	n/a		7.6
Energy consumption (Million litres)	433.0	437.6	402.7			-7.0
<b>Employment</b>						
Total Employed	29349	28967	28982.36			-1.2
FTE	21728	22303.26	22002.45			1.3
<b>Landings</b>						
Weight (thousand tonnes)	227.0	242.4	225.0	n/a		-1.8
Value (Million €)	1105.6	1202.0	1116.0	n/a		-0.3

(Source: EU Member States DCF data submissions) \*Landings weight value for 2010 was changed in Table 5.11.1 upon request from the Italian national expert and may not necessarily correspond to the data submitted and held in the JRC database.

The total number of fishing enterprises operating in the Italian fleet was 9,789 in 2010. The vast majority of fishing enterprises, 91%, owned a single vessel and 7% of the enterprises owned two to five fishing vessels. Only 2% of the fishing enterprises owned six or more fishing vessels. Fishing enterprises owning more than 6 vessels are mostly represented by fishing cooperatives. This juridical form is common in the Italian fishing sector and, in some cases, these are participated by more than 50 fishermen/vessels. Depending on the main aim of the fishing cooperatives, two different typologies can be identified:

1. Labour fishing cooperatives;
2. Services fishing cooperatives

In the first case fishing cooperative directly manage fishing vessels and labour associated can be assimilated to that of employees. In the second case the members manage their own vessels and the cooperative only provides some services such as marketing services, supply of on-board materials and administrative assistance. Increasingly, fishing cooperatives are carrying out aquaculture activities, giving fishermen the possibility to integrate income from fishing activities.

Total employment was around 28,982 jobs and 22,002 national FTEs in 2010. The level of employment followed a relatively stable trend between 2008 and 2010. The total number of employed decreased by 1% while the number of FTEs increased by 3% over the time period (Table 5.11.1; fig. 5.11.1).

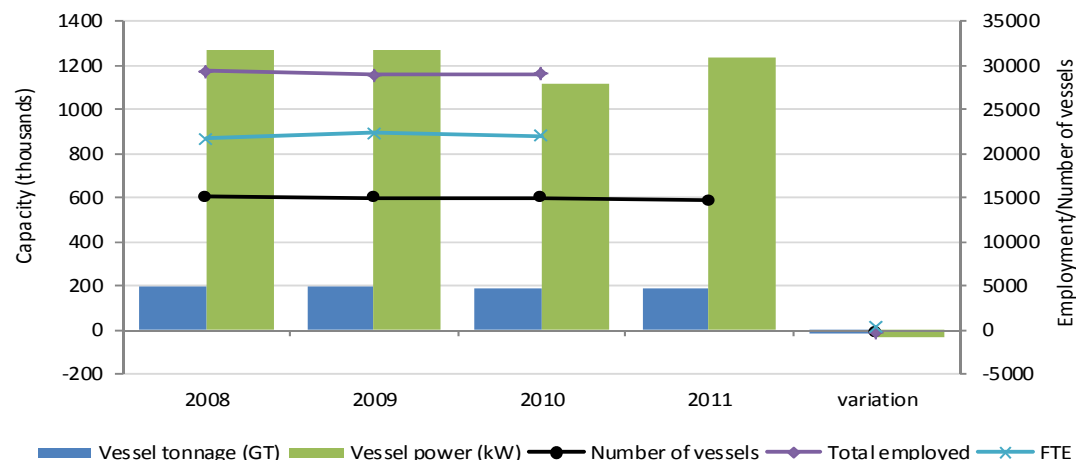


Figure 5.11.1 Italian national fleet capacity and employment trends: 2008-2012  
(Source: EU Member States DCF data submissions)

### 5.11.2 National fleet fishing activity and output

In 2010, the Italian fishing fleet spent a total of around 1,668 thousand days at sea (Table 5.11.1), 99% of which were actual fishing days. The total number of days at sea increased by around 5% between 2008 and 2010, while total fishing days increasing 8% during the same period. The total quantity of fuel consumed in 2010 was 403 million litres, a decrease of around 7% between 2008 and 2010 (fig. 5.11.2, left). However, between 2009 and 2010, due to the fuel crisis of 2010, both the total number of days at sea and fishing days decreased by around 6%, while total quantity of fuel consumed decreased by 8%.

The total volume of landings achieved by the Italian fleet in 2010 was 225 thousand tonnes of seafood, with a reduction of 7% respect to the previous year. The reduction in fishing activity as a consequence of the increase in fuel costs and the full implementation of the Council Regulation (EC) No 1967/2006 has heavily affected the Italian fishing fleet's production. Reg.(EC) No 1967/2006 for the implementation of management measures for a sustainable exploitation of marine resources in the Mediterranean entered into force in June 2010 after a long period when many of the restrictions were subject to derogation. The technical measures introduced by the regulation have affected the Italian productive structure and levels of fishing effort. The new regulation on mesh size for trawlers and seiners, fishing limitations within the three miles coast area for trawlers in the North Adriatic, ban of transparent goby, sandeel and fries of sardine fisheries are some examples of the significant changes that the regulation has implemented in the Italian and Mediterranean fishing sectors.

In 2011 European hake accounted for the highest value of landings (€90 million) by the national fleet, followed by crustaceans (€84 million), European anchovy (€75.9 million) and then deep water rose shrimp (€75.6 million) (fig. 5.11.3, top). In terms of landings composition, in 2010 European anchovy was the most common species landed in terms of volume (54 thousand tonnes), followed by Striped Venus (19,7 thousand tonnes) and European pilchard (16.2 thousand tonnes) (fig. 5.11.3, bottom).

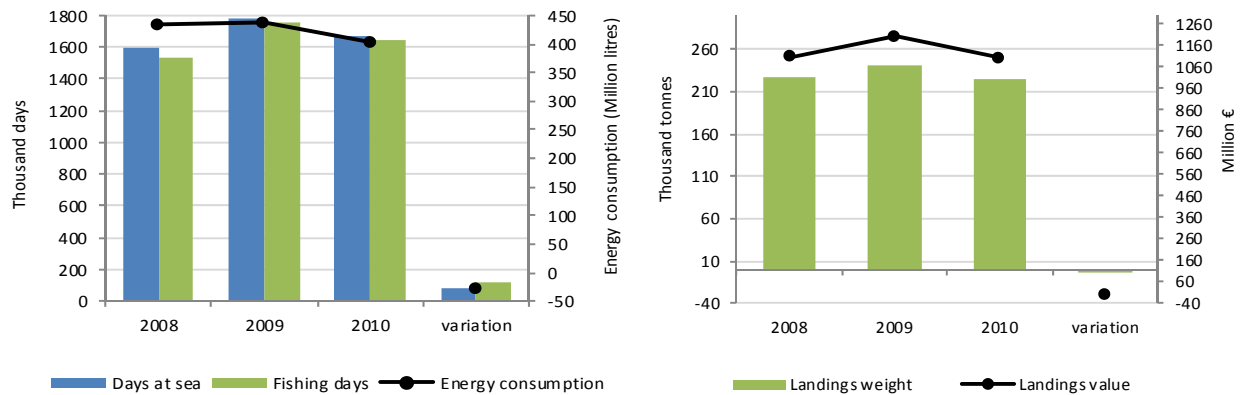


Figure 5.11.2 Italian national fleet fishing effort (left) and landings trends (right):2008-2010  
(Source: EU Member States DCF data submissions)

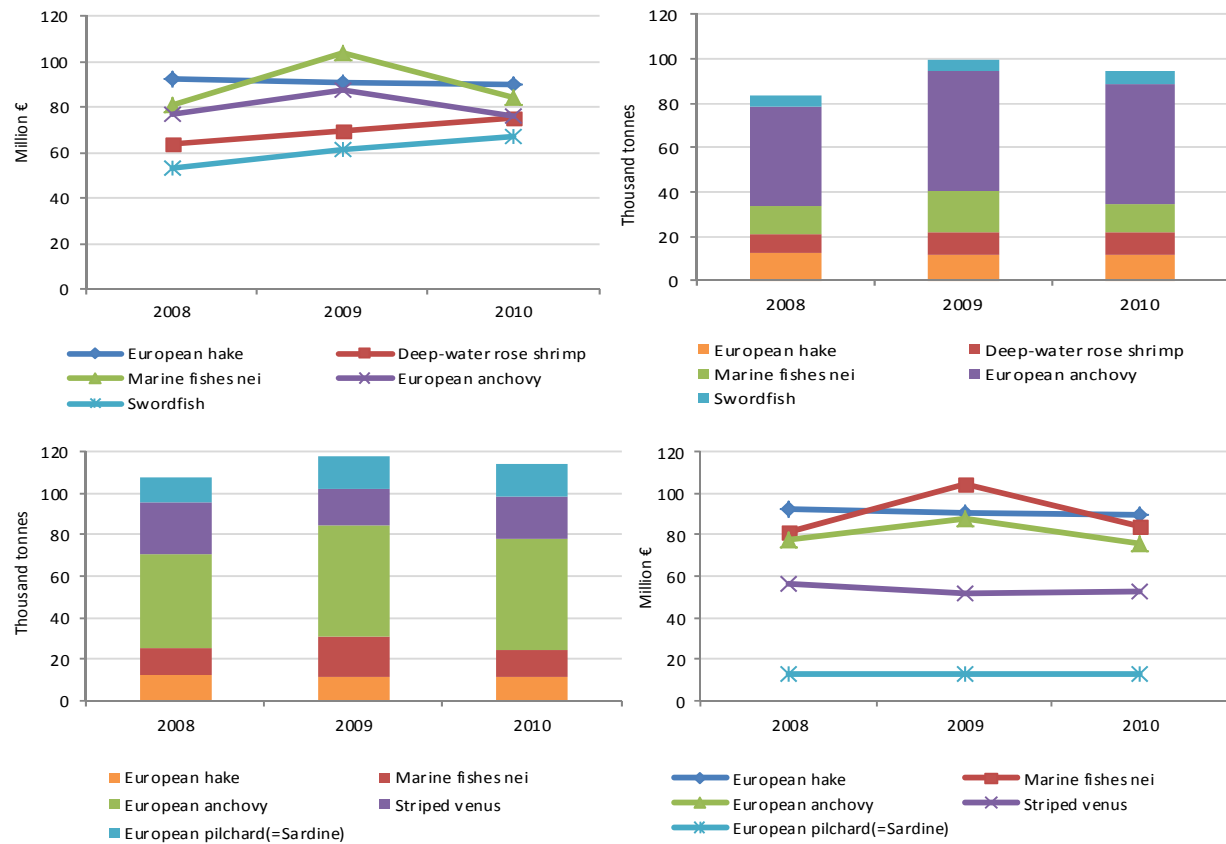


Figure 5.11.3 Italian national fleet total landings by key species in value (top) and weight (bottom) and corresponding weight and value:2008-2010  
(Source: EU Member States DCF data submissions)

The prices obtained for these key species generally remained stable between 2008 and 2010. In terms of prices, in 2010 swordfish achieved the highest average price per kilo by the Italian national fleet (€11.2 per kg), followed by European hake (€7.8 per kg) and deep-water red shrimp (€7.4 per kg) (fig. 5.11.5).

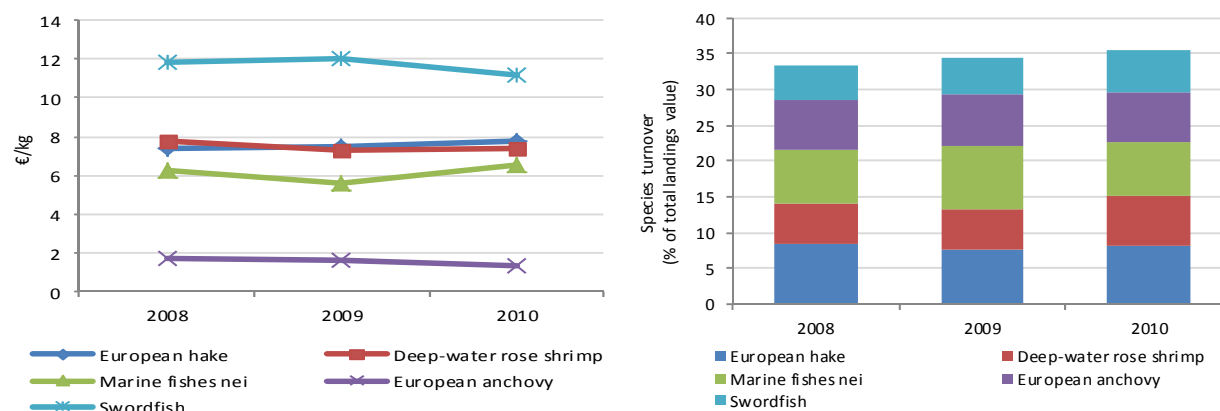


Figure 5.11.4 Total average price (left) and turnover as a percentage of total value of landings (right) for the five key species landed by the Italian national fleet: 2008-2011  
(Source: EU Member States DCF data submissions)

### 5.11.3 National fleet economic performance

The total amount of income generated by the Italian national fleet in 2010 was €1,137 million. This consisted of €1,115 million in landings value and €22 million in direct subsidies (Table 5.11.2). The total income of the Italian fleet increased slightly by 0,12% between 2008 and 2010. However, if compared with 2009, the total income decreased by almost 7% in 2010 (fig. 5.11.5).

Total expenditure by the Italian national fleet in 2010 was €978 million, amounting to 86% of total income. The largest expenditure items were crew wages (€265 million) and fuel costs (€238 million) (Table 5.11.2). Between 2008 and 2010, the total expenditure of the Italian fleet decreased by 1%, fluctuating between €985 million and €978 million. The main variations in cost items are registered for crew wages, with an increase of 21%, and energy costs, decrease of 21%. However, if compared with 2009, energy costs increased by over 17% in 2010 due to increases in fuel prices.

In terms of profitability, the total amount of GVA, gross profit and net profit (excluding subsidies) generated by the Italian national fleet in 2010 was €653 million, €335 million and €114 million, respectively (Table 5.11.2; fig. 5.11.5). In the same year, total subsidies amounted to €22.2 million. In 2010, the Italian fleet had an estimated capital value of €974 million and investments of €796 million.

Table 5.11.2 Italian national fishing fleet economic performance indicators: 2008-2011.

Forecast figures for 2011 are highlighted in blue and values are also presented as a percentage of total income (shaded grey columns)

	2008	As % of total income	2009	As % of total income	2010	As % of total income	2011	As % of total income	% change (2010-08)
<b>Income (Million €)</b>									
Landings income	1105.6	97.4%	1202.0	99.0%	1114.9	98.1%	n/a		0.8%
Direct subsidies	30.0	2.6%	12.6	1.0%	22.2	1.9%	n/a		-26.1%
Other income							n/a		
Fishing rights	0	0%	0	0%	0	0%	n/a		
<i>Total Income</i>	1135.6	100.0%	1214.6	100.0%	1137.0	100.0%	n/a		0.1%
<b>Expenditure (Million €)</b>									
Crew wages	218.2	19.2%	300.0	24.7%	265.0	23.3%	n/a		21.5%
Unpaid labour	47.3	4.2%	60.7	5.0%	52.5	4.6%	n/a		10.8%
Energy costs	302.7	26.7%	203.9	16.8%	238.5	21.0%	n/a		-21.2%
Repair costs	47.1	4.1%	47.0	3.9%	46.3	4.1%	n/a		-1.7%
Variable costs	132.4	11.7%	143.4	11.8%	135.3	11.9%	n/a		2.2%
Non-variable costs	43.8	3.9%	44.6	3.7%	41.9	3.7%	n/a		-4.4%
Rights costs	0.7	0.1%	0.6	0.0%	0.3	0.0%	n/a		-55.4%
<i>Total operating costs</i>	792.3	69.8%	800.2	65.9%	779.7	68.6%	n/a		-1.6%
Depreciation costs	192.7	17.0%	196.5	16.2%	198.4	17.5%	n/a		3.0%
Opportunity costs of capital	10.6	0.9%	32.0	2.6%	23.4	2.1%	n/a		121.1%
<b>Performance Indicators (Million €)</b>									
Gross value added (GVA)	579.6	51.0%	763.0	62.8%	652.9	57.4%	n/a		12.6%
Gross Profit	314.1	27.7%	402.3	33.1%	335.5	29.5%	n/a		6.8%
Net profit (incl. subsidies)	140.8	12.4%	186.5	15.4%	135.8	11.9%	n/a		-3.5%
Net profit (excl. subsidies)	110.8	9.8%	173.9	14.3%	113.6	10.0%	n/a		2.6%
<b>Capital value (Million €)</b>									
Fleet depreciated replacement value	928.1	81.7%	918.6	75.6%	974.2	86%			
Investments	n/a		n/a		n/a				
Financial position (%)	78		126		n/a				

(Source: EU Member States DCF data submissions)

Forecasts for 2011 are not available for income and cost items related to landings because landings and effort data for 2011 were not ready in the time for the call (usually available only 18 months after the end of the reference year).

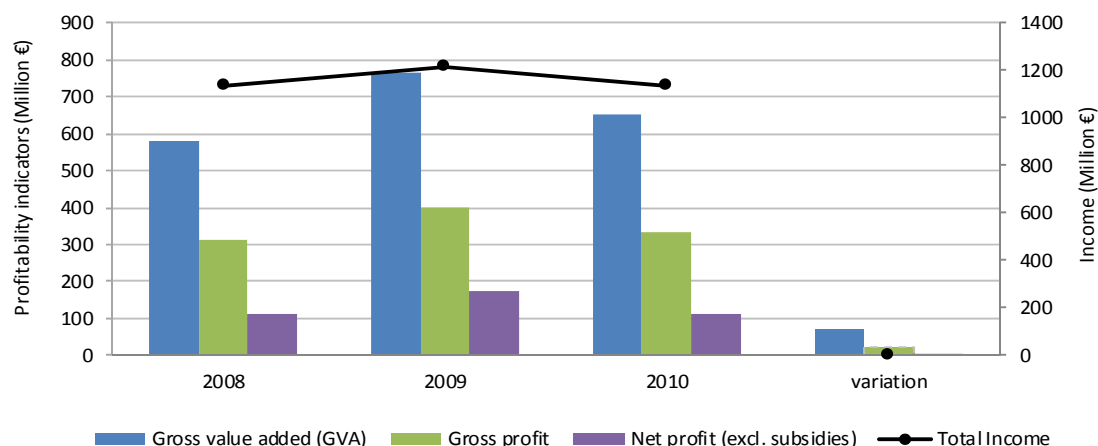


Figure 5.11.5 Italian national fishing fleet economic performance trends: 2008-2011  
(Source: EU Member States DCF data submissions)

#### 5.11.4 Fleet composition

The Italian national fleet consisted of 28 fleet segments in 2010. The fleet is highly diversified with a broad range of vessel types targeting different species predominantly in the Mediterranean Sea. There were six inactive length classes consisting of 1,685 vessels. These vessels are classified as inactive if they did not land any catch in 2010. In particular in 2010, given the reduced Italian quota of landings and to allow a faster stock recovery, the fishing activity of the Bluefin tuna purse seine fleet 24-40m was suspended for the whole fishing season.

Table 5.11.3 provides a breakdown of key performance indicators for all Italian fleet segments in 2010. A short description of the five most important segments in terms of total value of landings is provided below.

**Demersal trawl / seine 12-18m** – 1,401 vessels make up this segment and are based predominantly in the Adriatic Sea and Sicily channel. These vessels target demersal species such as hake, deep water rose shrimp, Norway lobster and spottail mantis squillid. The total value of landings was €216.4 million and around 3,363 FTEs were employed in this fleet segment in 2010, contributing to 19.4% and 15.3% of the total income from landings and FTEs generated by the MS fishing fleet, respectively. This fleet segment was highly profitable, with reported net profits (excluding subsidies) of around €37 million in 2010 (fig. 5.11.6).

Data on capacity for demersal trawlers and seiners between 12 and 18 metres shows a slightly decreasing trend from 2008 to 2011. The number of vessels reduced by 54 units (-3.7%), which is equivalent to a decrease by 0.3% in GT and 2.8% in kW. The declining trend in the number of vessel determined a reduction in the number of people employed to 113 units (2.8%) from 2008 to 2010.

The average days at sea per vessel has increased from 2008 to 2009, while a reduction has been registered in 2010 compared with the previous year. The total increase in the average days at sea from 2008 to 2010 was estimated at 3.1%. In the same period, the average fishing days per vessel has shown an increase by 6.0%. The variations in fishing activity indicators are strictly related to the changes in fuel price. The energy consumption per vessel shows a declining trend along the period under analysis, from 74 thousand in 2008 to 63 thousand in 2010 (-14.8%).

As reported above, vessels belonging to this fleet segment target demersal species such as European hake, deep water rose shrimp, Norway lobster and spottail mantis squillid. Among the top five species in terms of value, also the group of species defined as marine fishes nei must be mentioned for its importance in the total income. Prices of the main species reported in figure 5.11.6, with the exception of Norway lobster, show a stable trend from 2008 to 2010.

**Passive gears polyvalent 6-12m** – Around 5,940 vessels make up this segment and operate around the entire Italian coastline. The fleet targets a variety of species, such as common cuttlefish, European hake, surmullet and common sole. The total value of landings was €216.6 million and around 7,369 FTEs were employed in this fleet segment in 2010, contributing to 19.3% and 33.5% of the total income from landings and FTEs generated by the MS fishing fleet, respectively. This fleet segment reported net profits (excluding subsidies) of around €35 million in 2010 (fig. 5.11.7).

The number of vessels belonging to passive gears polyvalent 6-12m shows a stable trend from 2008 to 2011. However, the average size of these vessels has increased. Indeed, gross tonnage and horse power reveal increases of around 4%. The total number of employees for this fleet has reduced by 4%, from 10,639 to 10,196 people.

The average days at sea per vessel show an increase from 2008 to 2009 and a decrease in the subsequent year. From 2008 to 2010, the average days at sea and the fishing days increased by 3.4% and 5.7%, respectively. The variations in the fishing activity indicators are strictly related to the changes in fuel price. The energy consumption per vessel shows similar values in 2008 and 2010.

Among the top five species in terms of value, also the group of species defined as marine fishes nei must be mentioned for its importance in the total income. Prices of the main species reported in figure 5.11.7 show some significant increases from 2008 to 2010. In particular, the species showing the most important growth are common cuttlefish and common sole with increases by 33% and 7.8% respectively.

**Demersal trawl / seine 18-24m** – 740 vessels make up this segment and are based predominantly in the Adriatic Sea and Sicily Channel. These vessels target demersal species such as deep water rose shrimp, European hake, Norway lobster and red mullets. The total value of landings was €195.6 million and around 2,648 FTEs were employed in this fleet segment in 2010, contributing to 17.5% and 12% of the total income from landings and FTEs generated by the MS fishing fleet, respectively. This fleet segment was profitable, with reported profits of around €13 million in 2010.

**Demersal trawl / seine 24-40m** – Around 275 vessels make up this segment and operate predominantly in the south of Sicily. These vessels target demersal species, such as giant red shrimp, deep water rose shrimp, Norway lobster and European hake. The total value of landings was €112.7 million and around 1,692 FTEs were employed in this fleet segment in 2010, contributing to 10.1% and 7.7% of the total income from landings and FTEs generated by the MS fishing fleet, respectively. As a consequence of a strong reduction in fishing activity, this fleet segment made a large loss in 2010.

**Dredges 12-18m** – 699 vessels make up this segment and operate predominantly in Adriatic Sea. These vessels target mostly exclusively clams (Striped Venus). The total value of landings was around €63 million and around 400 FTEs were employed in this fleet segment in 2010, contributing to 5.7% and 1.8% of the total income from landings and FTEs generated by the Italian fishing fleet, respectively. This fleet segment made a profit of €13.52 million in 2010.

Table 5.11.3 Italian national fishing fleet composition and key indicators at fleet segment level for 2010

Fleet Segment	Number of vessels	Vessel tonnage (GT)	Vessel power (kW)	Total employed	FTE (national)	Days at sea	Energy consumption (kilolitres)	Landings weight (tonnes)	Landings value (thousand €)	Direct Subsidies (thousand €)	GVA (thousand €)	Gross profit (thousand €)	Net profit (excl. subsidies) (thousand €)	Net Profit (incl. subsidies) (thousand €)	Cluster
<b>DRB</b>	<b>699</b>	<b>9301</b>	<b>75422</b>	<b>1440</b>	<b>400</b>	<b>62616</b>	<b>14317</b>	<b>21794</b>	<b>62998</b>	<b>99</b>	<b>47492</b>	<b>26501</b>	<b>13420</b>	<b>13519</b>	
VL1218	699	9301	75422	1440	400	62616	14317	21794	62998	99	47492	26501	13420	13519	Cluster 1
<b>DTS</b>	<b>2603</b>	<b>117342</b>	<b>529133</b>	<b>8797</b>	<b>7950</b>	<b>386185</b>	<b>261151</b>	<b>77158</b>	<b>550436</b>	<b>19254</b>	<b>286890</b>	<b>144815</b>	<b>29787</b>	<b>49042</b>	
VL1218	1401	26881	194936	3986	3363	204658	88634	31630	216378	8690	125234	61936	37395	46085	
VL1824	740	44080	192309	2821	2648	114926	98489	28733	195581	6778	97776	49914	6684	13462	
VL2440	275	37530	111173	1642	1692	45617	67838	12831	112675	3158	46982	20907	-17263	-14105	Cluster 8
VL40XX	16	7727	17214	0	0	0	0	1751	12100	0	9338	8504	879	879	
VL0612	172	1124	13501	347	248	20985	6189	2214	13701	629	7561	3554	2092	2720	
<b>HOK</b>	<b>176</b>	<b>5812</b>	<b>35832</b>	<b>707</b>	<b>696</b>	<b>23224</b>	<b>8613</b>	<b>5148</b>	<b>43661</b>	<b>129</b>	<b>26753</b>	<b>12175</b>	<b>4624</b>	<b>4753</b>	
VL1218	126	2274	19009	440	415	14726	4772	2794	24910	88	16553	7271	4094	4183	Cluster 5
VL1824	50	3537	16823	266	281	8497	3841	2354	18751	41	10200	4903	529	571	Cluster 6
<b>PGP</b>	<b>9265</b>	<b>23805</b>	<b>319614</b>	<b>15119</b>	<b>11198</b>	<b>1131775</b>	<b>72868</b>	<b>41180</b>	<b>334744</b>	<b>470</b>	<b>222830</b>	<b>120965</b>	<b>64147</b>	<b>64616</b>	
VL1218	489	7322	72525	1112	1255	65807	14297	7738	60087	88	37024	21820	11644	11732	Cluster 7
VL0612	5940	13642	224096	10196	7369	761400	49241	26455	215602	381	142633	76076	35130	35512	
VL0006	2836	2841	22992	3812	2575	304567	9330	6987	59055	0	43172	23068	17373	17373	
<b>PMP</b>	<b>90</b>	<b>884</b>	<b>8078</b>	<b>219</b>	<b>174</b>	<b>9566</b>	<b>2618</b>	<b>805</b>	<b>6649</b>	<b>52</b>	<b>3613</b>	<b>2175</b>	<b>1593</b>	<b>1645</b>	
VL1218	53	736	6224	133	113	5515	1921	575	4820	52	2589	1387	1009	1061	Cluster 4
VL0612	37	148	1854	87	60	4050	698	230	1829	0	1023	788	584	584	
<b>PS</b>	<b>231</b>	<b>10284</b>	<b>51632</b>	<b>1619</b>	<b>717</b>	<b>20614</b>	<b>10687</b>	<b>29253</b>	<b>47942</b>	<b>209</b>	<b>30661</b>	<b>13219</b>	<b>923</b>	<b>1132</b>	
VL1218	126	2211	16880	771	288	12230	4732	7038	17596	44	10837	4620	2228	2272	Cluster 3
VL1824	47	2595	12428	306	124	3326	2266	8768	13308	99	9473	3713	1175	1275	
VL2440	59	5479	22324	542	305	5059	3689	13447	17039	66	10350	4886	-2480	-2414	
<b>TBB</b>	<b>72</b>	<b>5295</b>	<b>24700</b>	<b>324</b>	<b>320</b>	<b>10298</b>	<b>10575</b>	<b>3722</b>	<b>19522</b>	<b>579</b>	<b>9456</b>	<b>4271</b>	<b>-719</b>	<b>-140</b>	
VL1218	12	328	2603	54	36	1358	889	424	1642	57	794	324	75	132	
VL1824	26	1504	8499	110	104	3832	3453	824	5448	191	1986	421	-886	-694	
VL2440	34	3463	13598	160	180	5108	6233	2474	12433	331	6676	3527	92	422	
<b>TM</b>	<b>147</b>	<b>10707</b>	<b>49923</b>	<b>757</b>	<b>547</b>	<b>23558</b>	<b>21887</b>	<b>45698</b>	<b>48907</b>	<b>1372</b>	<b>25213</b>	<b>11338</b>	<b>2354</b>	<b>3726</b>	
VL1218	37	825	5680	102	80	5762	2805	10746	8573	196	5371	2198	1786	1982	Cluster 2
VL1824	36	2398	10399	176	130	6063	4266	11775	11469	399	6455	3197	1167	1565	
VL2440	74	7484	33843	480	338	11733	14816	23177	28865	777	13387	5944	-598	178	
<b>Cluster Name</b>		<b>Clustered Fleet Segments</b>													
CLUSTER1		DRB VL0612	DRB VL1218	DRB VL1824											
CLUSTER2		TM VL0612	TM VL1218												
CLUSTER3		PS VL0612	PS VL1218												
CLUSTER4		PMP VL1218	PMP VL1824												
CLUSTER5		HOK VL0612	HOK VL1218												
CLUSTER6		HOK VL1824	HOK VL2440												
CLUSTER7		PGP VL1218	PGP VL1824												
CLUSTER8		DTS VL2440	DTS40XX												

(Source: EU Member States DCF data submissions)



The following graphs refer to the segments of special interest for the Italian fishing fleet. Demersal trawlers 12-18m represent the most important segment in terms of value and volume of landings while passive gears 06-12m represent the most important fleet segment in terms of numbers of people employed.

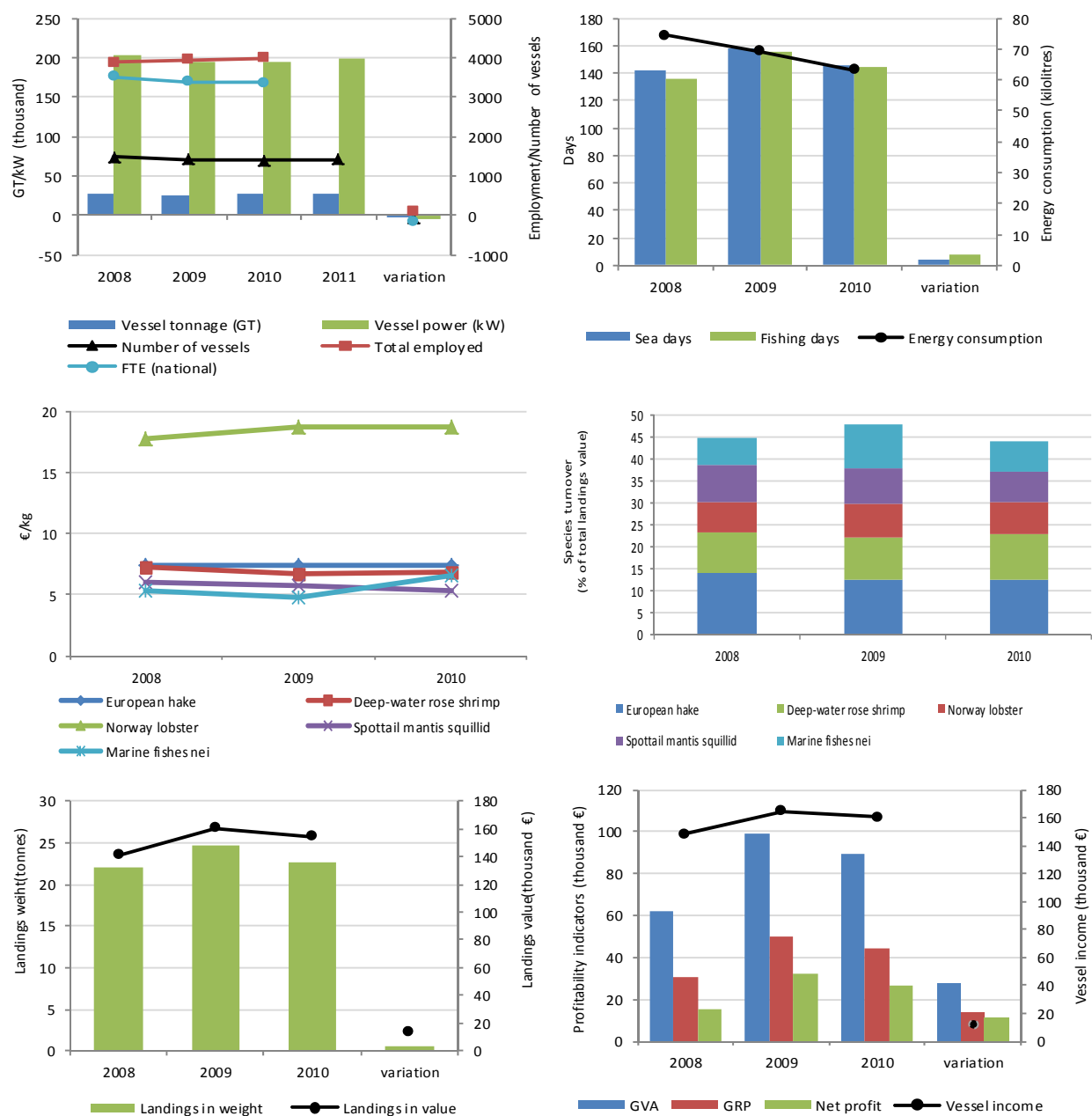


Figure 5.11.6 Key indicators for the average vessel in the Italian DTS VL1218 fleet segment, 2008-2011: top left – fleet segment capacity and employment; top right – fishing activity and effort; middle left – average prices (€/kg) for key species; middle right - turnover as a percentage of total value of landings for key species; bottom left - landings in value and weight: bottom right –main economic indicators for the average vessel (variation 2010-2008)

(Source: EU Member States DCF data submissions)

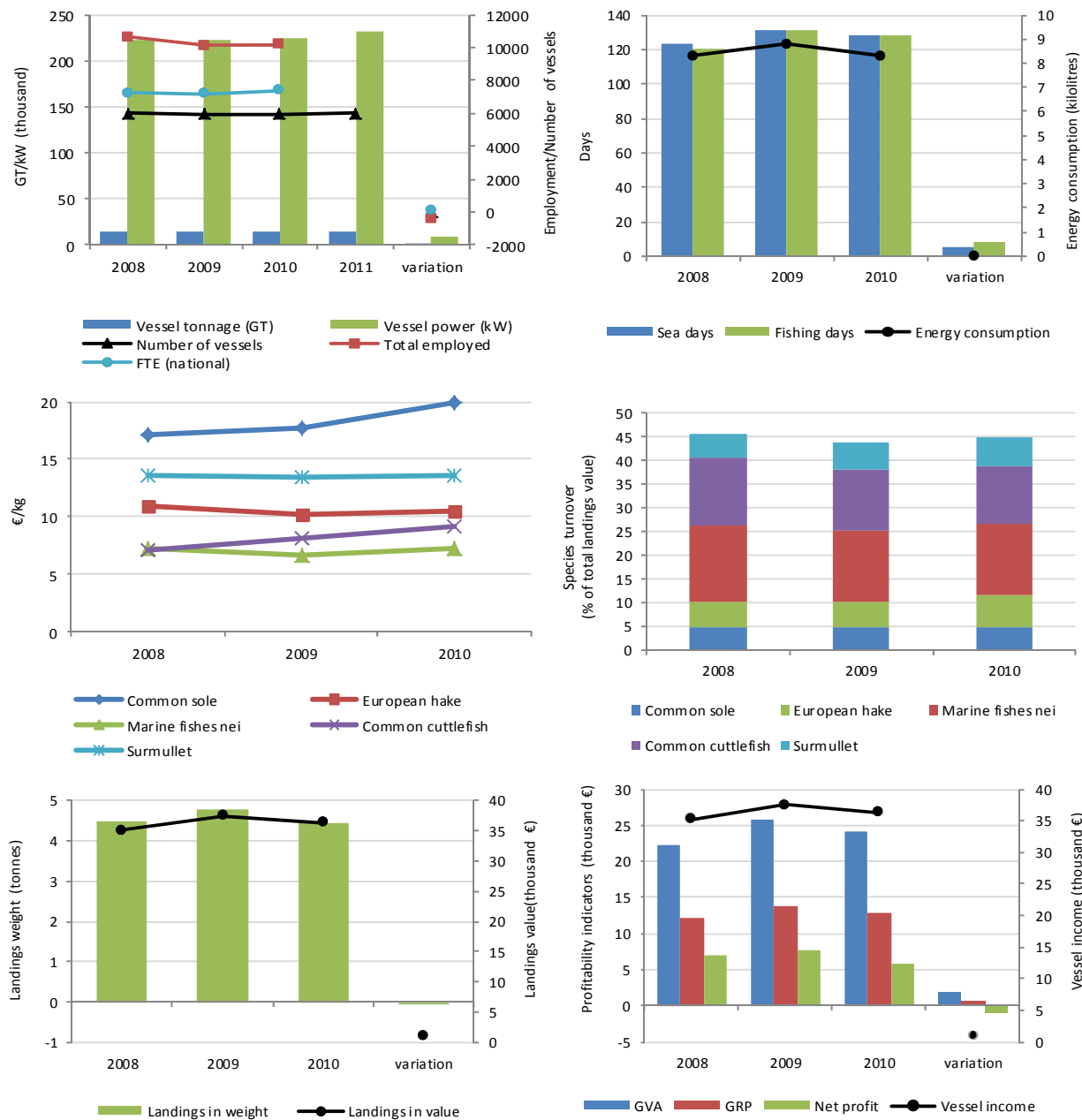


Figure 5.11.7 Key indicators for the average vessel in the Italian PGP VL0612 fleet segment 2008-2011: top left – fleet segment capacity and employment; top right – fishing activity and effort; middle left – average prices (€/kg) for key species; middle right - turnover as a percentage of total value of landings for key species; bottom left - total landings in value and weight; bottom right – main economic indicators for the average vessel (variation 2010-2008)

(Source: EU Member States DCF data submissions)

#### **5.11.5 Assessment for 2011 and 2012**

Overall, at the Italian fleet level declines both in landings and average prices are estimated for 2011. Total operation costs are expected to have increased, mainly due to the increase of fuel costs that started in the second half of 2010, which is consistent with the decrease in effort (fishing days). GVA, Gross profit and net profit are expected to decrease as well.

In 2010 a reduction in the demand of seafood and a consequent reduction in fish prices have affected the economic performance of the sector. As no relevant change has been registered in these factors, it is expected that the low demand and the reduced prices have affected the economic performance also in 2011 and 2012.

#### **5.11.6 Data issues**

The cluster Demersal trawl/seine 40XX (DTS 40XX) of the Italian fleet includes only the Oceanic fleet. This cluster also includes some vessels with length class 24-40m, which have been included in class 40XX for confidentiality issues. With respect to the previous years the estimation method of Full Time Equivalent has changed. The new estimated data for 2008, 2009 and 2010 are generally lower than the results obtained in the previous years with the old estimation method.

As previously mentioned, 2011 forecasts for income and cost items related to landings are not available because landings and effort data for 2011 were not ready at the time of the call. According to the Italian NP landings and effort data are ready with a 6 months delay, meaning that 2011 total data will not be available before the end of June 2012.



## 5.12 LATVIA

### 5.12.1 National fleet structure

In 2012 the Latvian Baltic Sea fishing fleet consisted of 722 registered vessels, with a combined gross tonnage of 9 thousand GT, total power of 25 thousand kW and an average age of 29 years (Table 5.12.1). The size of the Latvian Baltic Sea fishing fleet has followed a decreasing trend between 2008 and 2012. The number of vessels declined by 16% (or 136 vessels) while the total GT and kW of the fleet declined by 30% and 27%, respectively during the same period (fig. 5.12.1).

The general reason for the changes was connected to the vessels scrapping according to the multi-annual management plan to achieve a better balance between fishing capacity and the available resources. The fishing vessels were “reassigned for activities outside fishing (by scrapping or selling)”.

Table 5.12.1 Latvia national fishing fleet key indicators: 2008-2012

	2008	2009	2010	2011	2012	% change
<b>Capacity</b>						
Number of vessels	858	814	771	758	722	-15.9
Average vessel age	27	27	29	28	29	7.5
Gross Tonnage (GT, thousand)	12.9	12.4	9.8	9.1	9.0	-30.1
Power (kW, thousand)	34.2	32.7	26.7	25.5	25.0	-27.0
<b>Effort</b>						
Days at sea (thousand)	44.2	48.0	43.6	36.8		-16.9
Fishing days (thousand)	36.0	38.2	35.6	30.5		-15.3
Energy consumption (Million litres)	8.3	6.6	6.5			-21.6
<b>Employment</b>						
Total Employed	1621	1666	1619			-0.1
FTE	664	548	521			-21.5
<b>Landings</b>						
Weight (thousand tonnes)	86.5	78.5	74.0	59.8		-30.8
Value (Million €)	23.1	17.5	21.0	20.7		-10.4

(Source: EU Member States DCF data submissions)

The total number of fishing enterprises in the Latvian fleet was 135 in 2011. The vast majority of fishing enterprises, 58%, owned a single vessel and 41% of enterprises owned two to five fishing vessels.

Only 2 fishing enterprises owned six or more fishing vessels. More than 50% of the fishermen who have one vessel fished in the coastal zone for family consumption and not for commercial purposes. Total employment was around 1619 jobs and the 521 of FTEs in the Latvian fleet in 2010. The level of employment was relatively stable between 2008 and 2010, (Table 5.12.1; fig. 5.12.1).

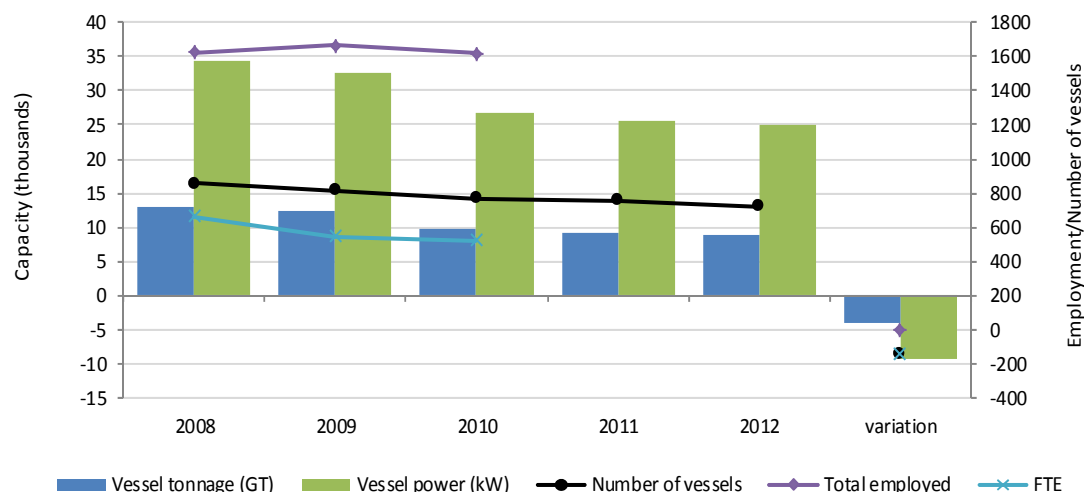


Figure 5.12.1 Latvia national fleet capacity and employment trends: 2008-2012  
(Source: EU Member States DCF data submissions)

### 5.12.2 National fleet fishing activity and output

In 2011 the Latvian Baltic Sea fishing fleet spent a total of around 37 thousand days at sea (Table 5.12.1), 81% of which were actual fishing days. The total number of days at sea declined by around 17% between 2008 and 2011, while total fishing days decreased during the same period by 15%. The total quantity of fuel consumed in 2010 was 7 million litres, a decrease of around 22% between 2008 and 2010 (fig. 5.12.2, left).

The total volume of landings achieved by the Latvian Baltic Sea fleet in 2011 was 59.8 thousand tonnes of seafood. The total volume of landings has declined between 2008 and 2011 (fig. 5.12.2, right). The main reason for decrease of volume of landing was because the Latvian quota for European Sprat in the Baltic reduced by 36% between 2008 and 2011.

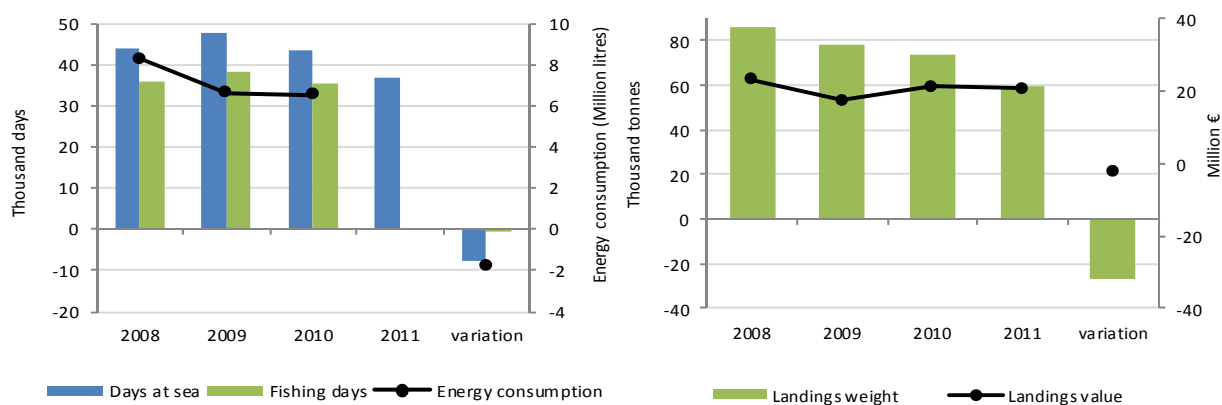


Figure 5.12.2 Latvia national fleet fishing effort (left) and landings trends (right): 2008-2011  
(Source: EU Member States DCF data submissions)

In terms of landings composition, in 2011 European Sprat was the most common species landed in terms of volume (32.7 thousand tonnes), followed by Atlantic Herring (20.5 thousand tonnes) and Atlantic Cod (4.9 thousand tonnes) (fig. 5.12.3, right). In 2011 Atlantic Cod accounted for the highest value of landings (€7.3 million) by the national fleet, followed by European Sprat (€6.98 million) and then Atlantic Herring (€5.3 million) (fig. 5.12.3, left).

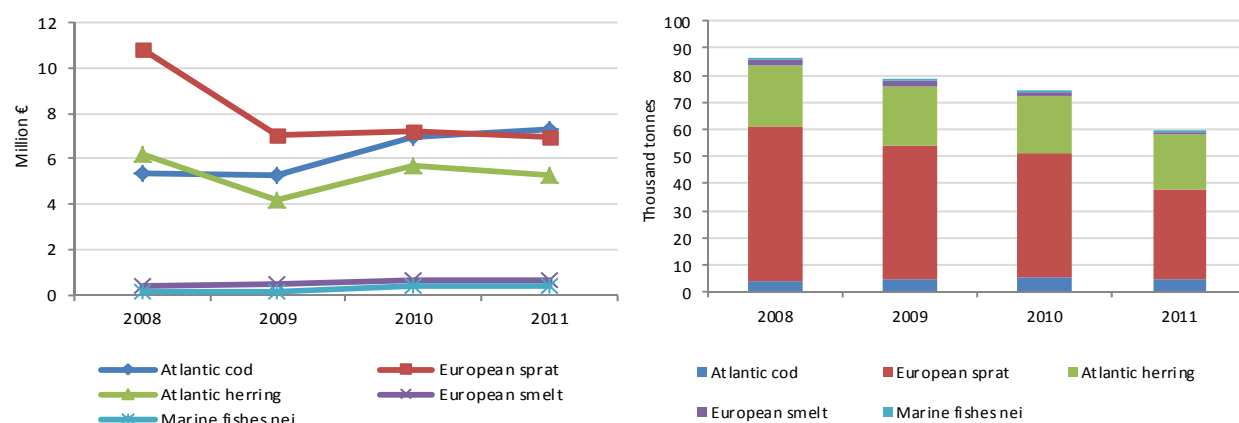


Figure 5.12.3 Latvia national fleet total landings by key species in value (top) and weight (bottom): 2008-2011  
(Source: EU Member States DCF data submissions)

The prices obtained for these key species generally increased between 2008 and 2011. In terms of prices, in 2011 coastal zone species which are included to “Marine fishes nei” achieved the highest average price per kilo by the Latvian national fleet (€1.76 per kg), followed by Atlantic Cod and European Smelt (€1.48 per kg) and (€0.57 per kg) (fig. 5.12.4, left). Despite of the highest prices for coastal zone species and for European Smelt these species have a negligible landed volume and value in the total landings composition.

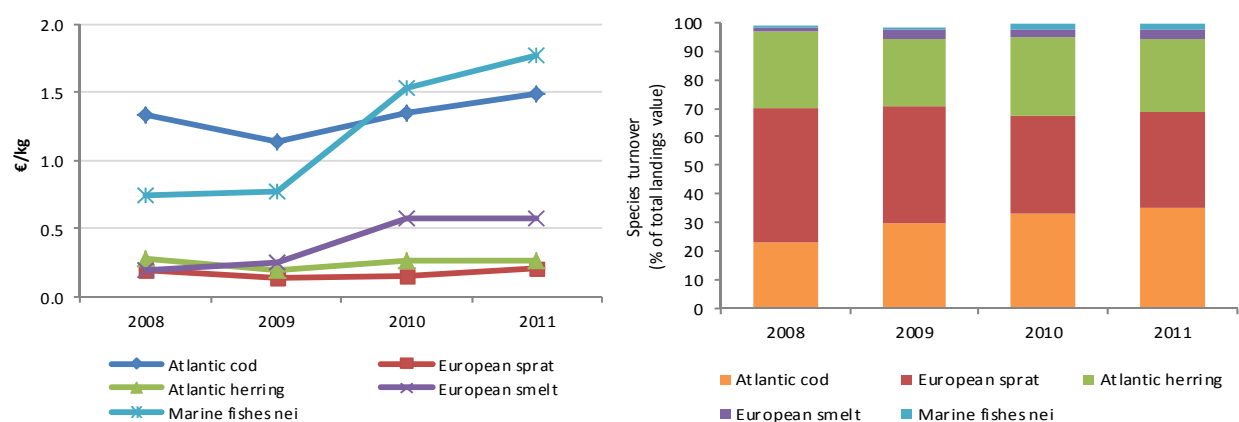


Figure 5.12.4 Total average price (left) and turnover as a percentage of total value of landings (right) for the five key species landed by the Latvian national fleet: 2008-2011  
(Source: EU Member States DCF data submissions)

Prices fluctuated in 2011, increasing in December, mainly as a result from the impact of information regarding the reduction of herring quotas in the Gulf of Riga and sprat in the Baltic Sea. Also prices

increased due to raw material shortage for the fish processing enterprises in the domestic market as most of the raw materials were exported.

### 5.12.3 National fleet economic performance

The total amount of income generated by the Latvian national fleet in 2010 was €21.9 million. This consisted of €21 million in landings values, €0.8 million in non-fishing income, and €34.2 thousand in direct subsidies (Table 5.12.2). The total income of the Latvian fleet decreased 16% between 2008 and 2010 (fig. 5.12.5).

Total expenditure by the Latvian national fleet in 2010 was €13.8 million, amounting to 63% of total income. The largest expenditure items were non-variable costs and energy costs (€3.6 and €3.4 million respectively) (Table 5.12.2). Between 2008 and 2010, the total expenditure of the Latvian fleet is fluctuating between €15.4 million and €13.8 million, largely due to changes in fuel, and wages.

In terms of profitability, the total amount of GVA, gross profit and net profit generated by the Latvian national fleet in 2010 was €11.5 million, €8.2 million and €1.6 million respectively (Table 5.12.2, fig. 5.12.5). In 2010, the Latvian fleet had an estimated capital value of €45.6 million and a rate of return on investment of 0.3%. In the end of 2008 and in 2009 the fishery sector received a negative impact from the global economic crisis, which led to significant decrease of profit.

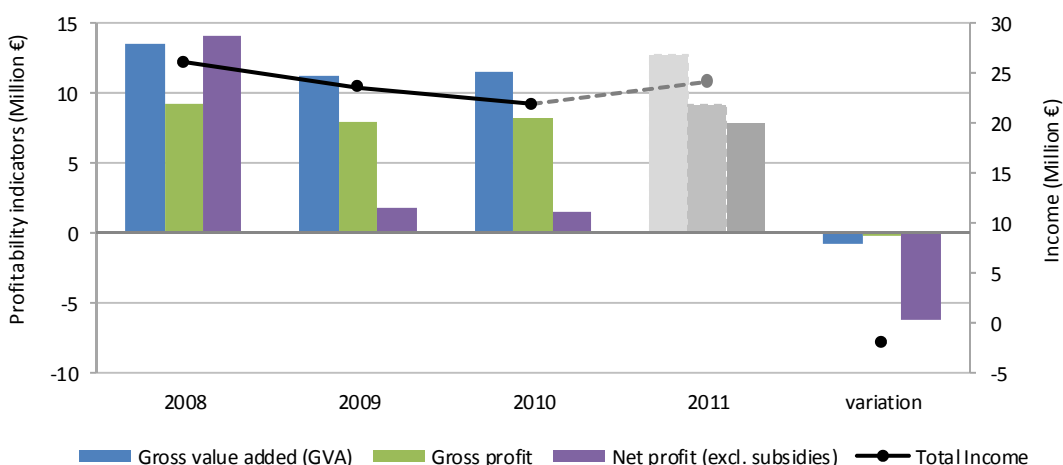


Figure 5.12.5 Latvia national fishing fleet economic performance trends: 2008-2011

(Source: EU Member States DCF data submissions)



Table 5.12.2 Latvia national fishing fleet economic performance indicators: 2008-2011.

Forecast figures for 2011 are highlighted in blue and values are also presented as a percentage of total income (shaded grey columns)

	2008	As % of total income	2009	As % of total income	2010	As % of total income	2011	As % of total income	% change (2010-08)
<b>Income (Million €)</b>									
Landings income	23.1	88.6%	17.5	74.0%	21.0	96.0%	20.7	85.6%	-9.1%
Direct subsidies	1.6	6.1%	3.4	14.5%	0.0	0.2%	1.7	7.1%	-97.8%
Other income	1.4	5.3%	2.7	11.5%	0.8	3.8%	1.8	7.3%	-39.2%
Fishing rights income	0	0%	0	0%	0	0%	0	0%	
<i>Total Income</i>	26.1	100%	23.6	100%	21.9	100%	24.2	100%	-16.1%
<b>Expenditure (Million €)</b>									
Crew wages	4.1	15.7%	3.3	13.8%	3.2	14.6%	3.5	14.4%	-21.6%
Unpaid labour	0.1	0.3%	0.1	0.3%	0.0	0.2%	0.1	0.2%	-41.3%
Energy costs	4.4	16.8%	3.5	14.8%	3.4	15.7%	3.5	14.3%	-21.7%
Repair costs	0.9	3.6%	0.9	3.6%	0.8	3.8%	0.7	2.9%	-11.4%
Variable costs	3.1	11.7%	2.1	9.1%	2.5	11.6%	2.1	8.8%	-16.8%
Non-variable costs	2.7	10.2%	2.5	10.4%	3.6	16.3%	3.5	14.5%	33.9%
Rights costs	0.2	0.7%	0.2	1.0%	0.2	0.7%	0.2	0.8%	-16.1%
<i>Total operating costs</i>	15.4	59.0%	12.5	53.0%	13.8	63.0%	13.6	55.9%	-10.5%
Depreciation costs	n/a		1.3	5.6%	1.3	6.2%	1.3	5.5%	
Opportunity costs of capital	-4.7	-18.1%	4.8	20.4%	5.3	24.3%	1.8	7.4%	212.4%
<b>Performance Indicators (Million €)</b>									
Gross value added (GVA)	13.5	51.6%	11.2	47.5%	11.5	52.4%	12.7	52.4%	-14.7%
Gross profit	9.3	35.6%	7.9	33.5%	8.2	37.6%	9.2	37.8%	-11.4%
Economic profit (incl. subsidies)	15.6	59.8%	5.2	22.0%	1.6	7.3%	9.5	39.4%	-89.8%
Economic profit (excl. subsidies)	14.0	53.7%	1.8	7.5%	1.6	7.1%	7.8	32.3%	-88.9%
<b>Capital value (Million €)</b>									
Fleet depreciated replacement value	61.6	235.8%	54.8	232.3%	45.6	208.1%	n/a		-26.0%
Investments	n/a		0.2	1.0%	0.3	1.5%			
Fishing rights									

(Source: EU Member States DCF data submissions)

#### 5.12.4 Fleet composition

The Latvian national fleet operated in the Baltic Sea consisted of 4 fleet segments in 2010 (Table 5.12.3) provides a breakdown of key performance indicators for all Baltic Sea Latvian fleet segments in 2010. A short description of the two most important segments in terms of total value of landings is provided below.

Table 5.12.3 Latvia national fishing fleet composition and key indicators at fleet segment level for 2010

Fleet Segment	Number of vessels	Vessel tonnage (GT)	Vessel power (kW)	Total employed	FTE (national)	Days at sea	Energy consumption (kilolitres)	Landings weight (tonnes)	Landings value (thousand €)	Direct Subsidies (thousand €)	GVA (thousand €)	Gross profit (thousand €)	Net profit (excl. subsidies) (thousand €)	Net Profit (incl. subsidies) (thousand €)	Cluster
<b>DFN</b>	<b>18</b>	<b>1627</b>	<b>3224</b>	<b>99</b>	<b>42</b>	<b>1893</b>	<b>844</b>	<b>2372</b>	<b>3203</b>	<b>1</b>	<b>1962</b>	<b>1612</b>	<b>595</b>	<b>596</b>	
VL2440	18	1627	3224	99	42	1893	844	2372	3203	1	1962	1612	595	596	CLUSTER1
<b>PGP</b>	<b>687</b>	<b>1006</b>	<b>5912</b>	<b>1175</b>	<b>329</b>	<b>34215</b>	<b>39</b>	<b>2561</b>	<b>1232</b>	<b>0</b>	<b>1111</b>	<b>1008</b>	<b>-319</b>	<b>-319</b>	
VL0010	687	1006	5912	1175	329	34215	39	2561	1232	0	1111	1008	-319	-319	
<b>TM</b>	<b>66</b>	<b>7122</b>	<b>17558</b>	<b>345</b>	<b>150</b>	<b>7521</b>	<b>5646</b>	<b>69085</b>	<b>16601</b>	<b>33</b>	<b>8415</b>	<b>5618</b>	<b>1288</b>	<b>1321</b>	
VL1218	17	488	2827	51	31	2578	1460	10385	2378	1	1123	402	-399	-397	CLUSTER3
VL2440	49	6634	14731	294	119	4943	4186	58699	14223	32	7292	5216	1687	1719	CLUSTER2
Cluster Name		Clustered Fleet segments													
CLUSTER1		DFN VL1824		DFN VL2440											
CLUSTER2		TM VL2440		TM VL40XX											
CLUSTER3		TM VL1218		TM VL1824											

(Source: EU Member States DCF data submissions)

**Fleet segment Pelagic trawlers 24-40 metres** – 49 vessels make up this segment and are based predominantly in Baltic Sea (AREA27). These vessels target pelagic species such as European Sprat and Atlantic Herring. The total value of landings was €14 million and around 119 FTEs was employed in this fleet segment in 2010, contributing to 68% and 23% of the total income from landings and FTEs generated by the MS fishing fleet, respectively. This fleet segment was highly profitable, with reported profits of around €1.64 million in 2010 (fig. 5.12.6).

**Fleet segment Fixed Netters 24-40 metres** – Around 18 vessels make up this segment and operate predominantly Baltic Sea (AREA27). The fleet targets a variety of species, such as Atlantic Cod and European flounder. The total value of landings was €3.2 million and around 42 FTEs were employed in this fleet segment in 2010, contributing to 15% and 8% of the total income from landings and FTEs generated by the MS fishing fleet, respectively. This fleet segment made a profit of around €0.8 million in 2010 (fig. 5.12.7).

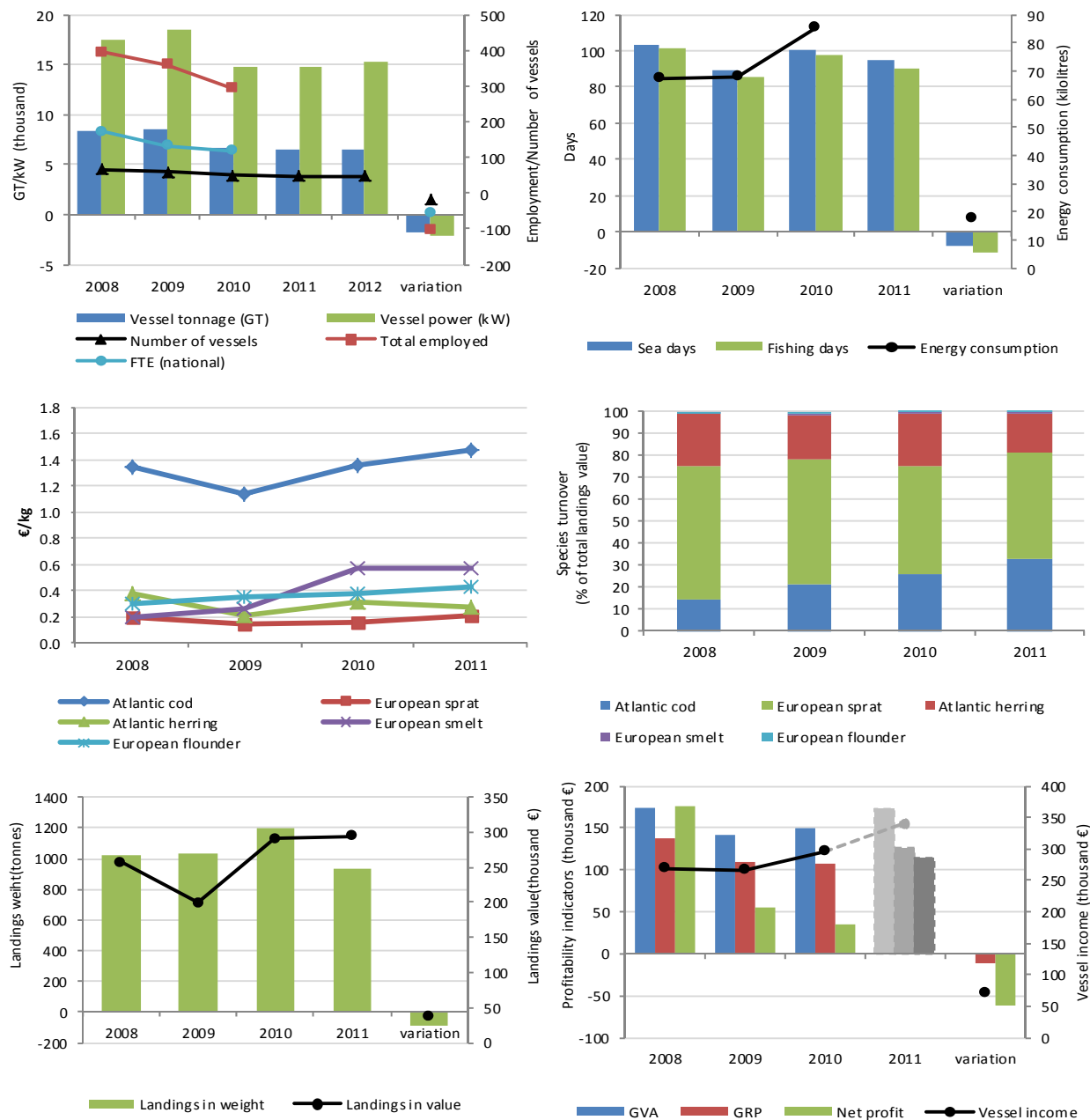


Figure 5.12.6 Key indicators for the average vessel in the Latvia TM VL2440 fleet segment, 2008-2011:

top left – fleet capacity and employment; top right – fishing activity and effort; middle left – average prices (€/kg) for key species; middle right - turnover as a percentage of total value of landings for key species; bottom left - landings in value and weight; bottom right –main economic indicators for the average vessel (variation 2010-2008)

(Source: EU Member States DCF data submissions)

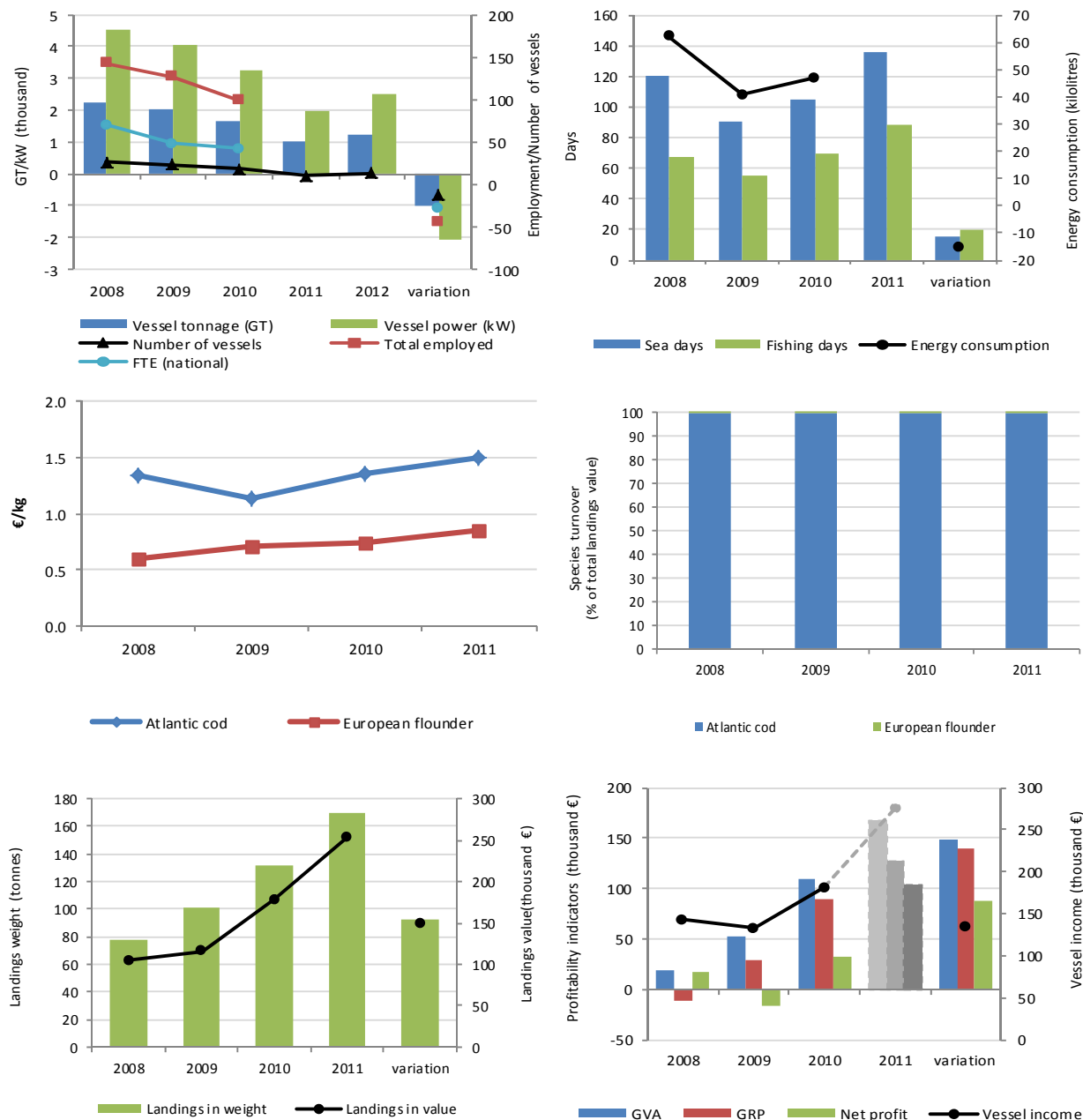


Figure 5.12.7 Key indicators for the average vessel in the Latvia DFN VL2440 fleet segment 2008-2011:

top left – fleet capacity and employment; top right – fishing activity and effort; middle left – average prices (€/kg) for key species; middle right - turnover as a percentage of total value of landings for key species; bottom left - total landings in value and weight; bottom right –main economic indicators for the average vessel (variation 2010-2008)

(Source: EU Member States DCF data submissions)

#### **5.12.5 Assessment for 2011 and 2012**

Analysis of the results of economic performance indicators calculation by the formulas accepted in the report as well as the projections for 2011, the following can be concluded: (1) the percentage changes from 2008 to 2010 in the most cases showed negative tendencies. However it should be taken into account that 2008 was the most profitable year. Between 2008 and 2010 the number of vessels reduced by 16 % and the TAC for sprat, which is the most common species for Latvian fishing fleet, declined by 16 %; (2) overall, there were two tendencies in the activity of Latvian Baltic Sea fishing fleet - reduction of volume of landings and increase in average prices of fish to have a result in 8% decrease in income, from €26 million in 2008 to €24 million in 2011. Total operating costs are expected to have declined by 10%, mainly due to a negligible fluctuation in the cost structure. The Effort has decreased by 17% (days at sea) and landed volume by 30%. The value of landing has reduced from €23 million to €21 million between 2008 and 2011. GVA, gross profit and net profit are expected to reduce to €12.7, 9.1 and €9.5 million respectively in 2011 (Table 5.12.1; 5.12.2; fig. 5.12.5). However it should be taken into account that more precise analysis for 2011 can be made after receiving of final economic data on income and costs.

#### **5.12.6 Data issues**

All transversal data for 2008 and 2010 on the whole fleet were taken from Integrated Control and Information System for Latvian a fishery, which includes the logbook data and technical parameters of fishing vessels from Fishing Vessels Register. The data were obtained monthly and covered all the member of population.

All economic variables for 2008 - 2010 were received from Central Statistic Bureau of Latvia (CSB) state statistical form/questionnaire "1-Fisheries" and other statistical sources of economic information based on the annual balance sheet. Primary economic information from state statistical form/questionnaire "1-Fisheries" was received annually from owners of fishing firms aggregated by fleet segments. Economic data covered all the members of population. Despite economic data collection is based on questionnaire form, participation of the responders is obligatory according to the Latvian legislation. Achieved sample rate was 100%.



## 5.13 LITHUANIA

### 5.13.1 National fleet structure

In 2011 the Lithuanian fishing fleet consisted of 171 registered vessels, with a combined gross tonnage of 45,96 thousand GT, total power of 54,4 thousand kW and an average age of 26,7 years (Table 5.13.1). The size of the Lithuanian fishing fleet has followed a decreasing trend between 2008 and 2011. The number of vessels declined by 31,6% (or 79 vessels), while the total GT and kW of the fleet decreased by 24,6% and 18,5%, respectively during the three year period (fig. 5.13.1). The decreasing trend of the total number of vessels was mostly specific to coastal area fleet, influenced by compensations for the permanent termination of fishing activity. Capacity decline was a result of fleet capacity reduction policy. During the period of 2008 – 2011, the rate of capacity reduction is decelerating regarding the balance between capacity and available fishing opportunities.

Table 5.13.1 Lithuanian national fishing fleet key indicators: 2008-2012

	2008	2009	2010	2011	2012	% change
<b>Capacity</b>						
Number of vessels	250	219	193	171	n/a	-31.6
Average vessel age	25	25	26	27	n/a	9.0
Gross Tonnage (GT, thousand)	61.0	50.4	49.8	46.0	n/a	-24.6
Power (kW, thousand)	66.8	58.6	57.7	54.4	n/a	-18.5
<b>Effort</b>						
Days at sea (thousand)	7.0	15.6	10.6	10.1		44.7
Fishing days (thousand)	6.0	7.9	7.3	8.3		38.0
Energy consumption (Million litres)		80.8	63.3			
<b>Employment</b>						
Total Employed	1046	700	720			-31.2
FTE	617	531	520			-15.7
<b>Landings</b>						
Weight (thousand tonnes)	176.1	207.2	107.5	112.2		-36.3
Value (Million €)	84.3	85.3	59.9	68.0		-19.3

(Source: EU Member States DCF data submissions)

The total number of fishing enterprises in the Lithuanian fleet was 113 in 2011. The vast majority, almost 69% of fishing enterprises owned a single vessel and 28% of enterprises owned two to five fishing vessels. Only 3 fishing enterprises owned six or more fishing vessels.

Total employment was around 720 jobs and 520 FTEs in the Lithuanian fleet during the year 2010. The level of employment decreased significantly between 2008 and 2010, with the total number employed persons fell by 31% and the number of FTEs decreased by 16% over the time period (Table 5.13.1; fig. 5.13.1). As far as most part of FTE in the Lithuanian fleet is generated by two segments operating in high seas and Baltic Sea, the rate of FTE decrease during the reference period was lower compared to the decline in the number of persons employed and it is expected to stabilise during the forthcoming period.

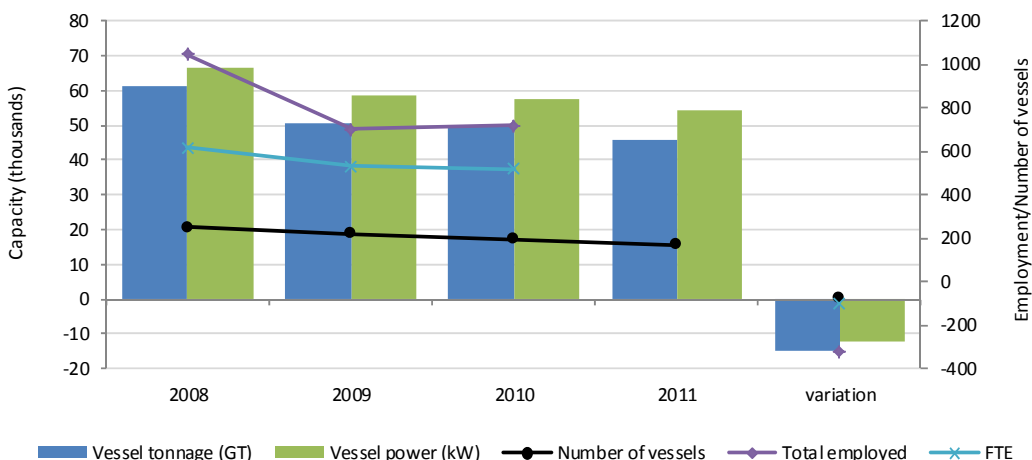


Figure 5.13.1 Lithuanian national fleet capacity and employment trends: 2008-2011.  
(Source: EU Member States DCF data submissions)

### 5.13.2 National fleet fishing activity and output

In 2011 the Lithuanian fishing fleet spent a total of around 10 thousand days at sea (Table 5.13.1), 80% of which were actual fishing days. The total number of days at sea increased by around 45% between 2008 and 2011, while total fishing days also soared during the same period. The total quantity of fuel consumed in 2010 was 63 million litres, a decrease of around 22% between 2009 and 2010 (fig. 5.13.2, left).

The total volume of landings achieved by the Lithuanian fleet in 2011 was 112,2 thousand tonnes of seafood. The total volume of landings has declined by 36% between 2008 and 2011 (fig. 5.13.2, right). This significant decrease in volumes of landings at the national level was mostly influenced by long distance fishery segment where catches were limited by introducing quotas for Pacific (Chilean) jack mackerel since the year 2010. The trend of decrease in landings during 2008 and 2011 also equates to the change of capacity figures.

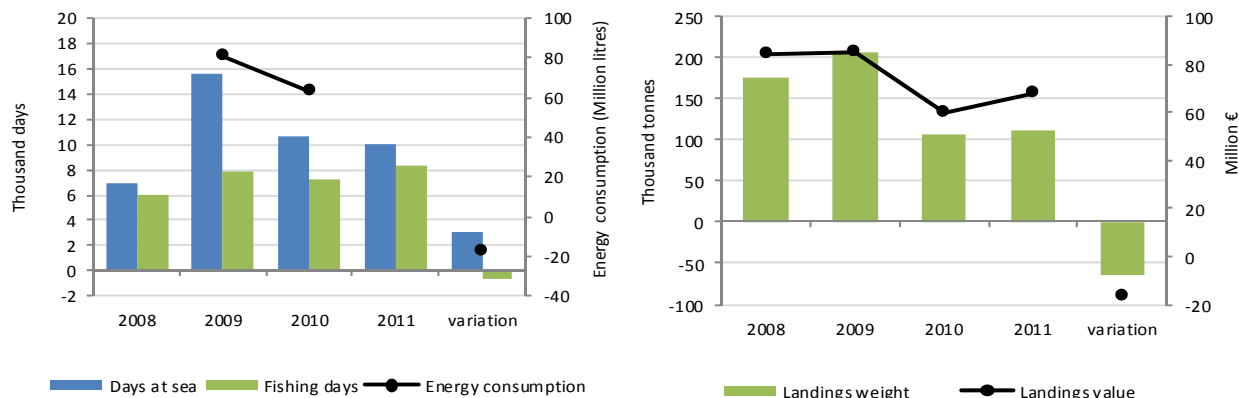


Figure 5.13.2 Lithuanian national fleet fishing effort (left) and landings trends (right): 2008-2011  
(Source: EU Member States DCF data submissions)



In terms of landings composition, in 2011 Round Sardinella was the most common species landed in terms of volume (31,9 thousand tonnes), followed by European pilchard (21,9 thousand tonnes), Cunene horse mackerel (18,6 thousand tonnes), European sprat (9,7 thousand tonnes) and Atlantic cod (3,1 thousand tonnes) (fig. 5.13.3, right). Landings of Baltic herring and European flounder during reference year was 2,65 thousand tonnes and 0,45 thousand tonnes respectively.

The assessment of landings composition will be more emphasised on the Baltic Sea and coastal areas due to the importance of the main segments (high number of enterprises are involved) operating there. Landings of Atlantic cod between 2008 and 2011 increased by 20,7%, mainly due to the 42% increase in fishing quota for cod in Baltic sea. However, compared to 2010, landings of Atlantic cod declined by 4%. This could be reasoned by the reduction of vessels targeting these species. The same trend was observed for Baltic herring, whereas landings of European sprat and flounder significantly decreased between 2008 and 2011. European sprat and Baltic herring quotas decreased significantly between 2008 and 2011.

In 2011 Cunene horse mackerel accounted for the highest value of landings (€15,06 million) by the national fleet, followed by round sardinella (€13,28 million), Atlantic redfishes (*Sebastes* spp.) (€9,76 million) and European pilchard (€8,98 million). These species were landed by High Sea vessels. In the Baltic Sea and its coastal area, the highest values of landings were determined for Atlantic cod (€3,91 million) and European sprat (€1,21 million) (fig. 5.13.3, left). Value of Baltic herring landings was €0,73 million, whereas European flounder €0,18 million.

The value of landings of Atlantic cod have increased by 20,5% since 2008. It is associated with the growing volume of cod landings, keeping in mind that average prices were at the same level during the years of 2008 and 2011. Values of Baltic herring landings during reference period increased by 25,6%, whereas value of European flounder and sprat decreased 36% and 52% respectively.

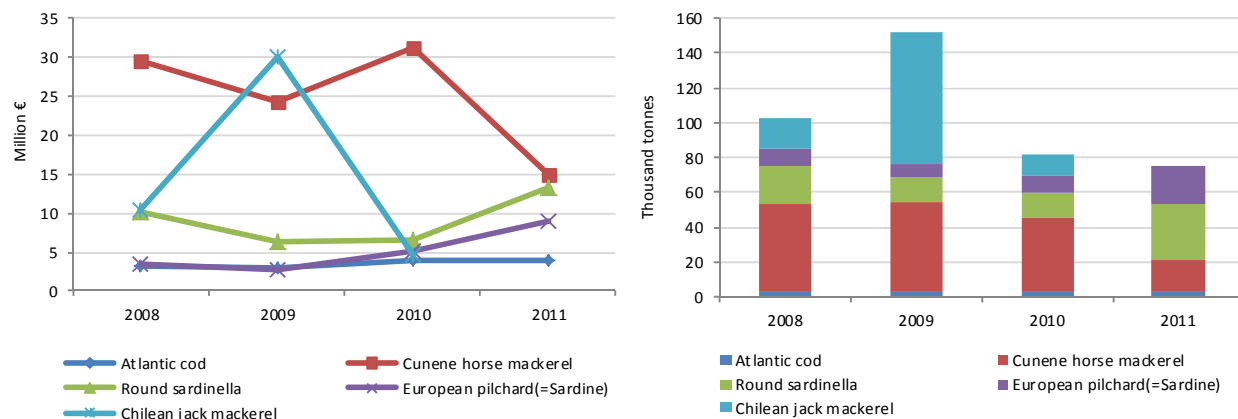


Figure 5.13.3 Lithuanian national fleet total landings by key species in value (left) and weight (right):2008-2011.  
(Source: EU Member States DCF data submissions)

The prices obtained for these key species generally increased between 2008 and 2011 and only in few cases remained stable. In terms of prices, during the year 2011, Atlantic cod had the highest average price per kilo (€1,26 per kg) among the key species landed by Lithuanian national fleet, followed by Cunene horse mackerel (€0,81 per kg), round sardinella (€0,42 per kg), European pilchard (€0,41 per kg), European flounder (€0,40 per kg), Baltic herring (€0,28 per kg) and European sprat (€0,12 per kg) (fig. 5.13.4).

Between 2008 and 2011, the prices of fish landed from the Baltic Sea showed a decreasing trend. Only prices for Atlantic cod remained at €1,26 per kg level. Describing the trend of Atlantic cod prices, it declined during 2008 – 2009 to €1,04 per kg and then soared year by year to €1,26 per kg level in 2011. Prices of European flounder decreased by 5,5%, European sprat by 8,5% and Baltic herring by 15% during the reference period.

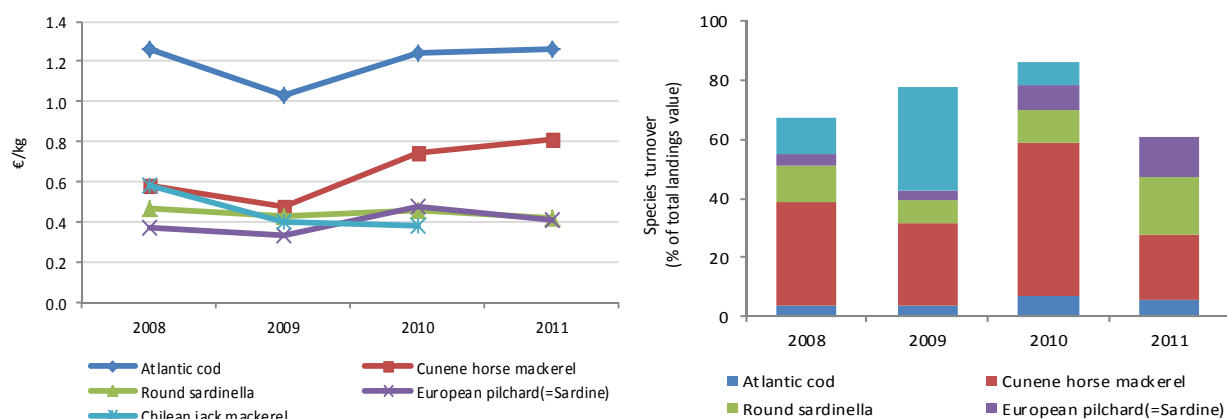


Figure 5.13.4 Total average price (left) and turnover as a percentage of total value of landings (right) for the five key species landed by the Lithuanian national fleet: 2008-2011.  
(Source: EU Member States DCF data submissions)

### 5.13.3 National fleet economic performance

The total amount of income generated by the Lithuanian national fleet in 2010 was €42,6 million. This consisted of €39,4 million in landings values, €3,1 million in non-fishing income, and €0,1 million in direct subsidies (Table 5.13.2). The total income of the Lithuanian fleet declined 47,3% between 2008 and 2010 (Fig. 5.13.5).

Total expenditure (excluding annual depreciation and opportunity costs) by Lithuanian national fleet in 2010 was €42.2 million, amounting to 99% of total income. The largest expenditure items were other variable and energy costs – €15,1 million and €13,0 million respectively. Crew costs amounted €4,4 million (Table 5.13.2). Between 2008 and 2010, the total expenditure of the Lithuanian fleet decreased by 41.3%, fluctuating between €72 million and €42 million. The largest cost items were influenced by high fuel prices and negatively affected the profit of the fleet. The high average age of vessels over 24m had relatively large costs for repair and maintenance. Non variable costs for the reference period decreased proportionally to income.

In terms of profitability, the total amount of GVA in 2010 was €4,7 million, gross profit was €0,19 million and the Lithuanian national fleet generated a net loss (excluding subsidies) of €4 million. (Table 5.13.2, fig. 5.13.5). In 2010, the Lithuanian fleet had an estimated replacement value of €47,6 million.

Table 5.13.2 Lithuanian national fishing fleet economic performance indicators: 2008-2011.

Forecast figures for 2011 are highlighted in blue and values are also presented as a percentage of total income (shaded grey columns)

	2008	As % of total income	2009	As % of total income	2010	As % of total income	2011	As % of total income	% change (2010-08)
<b>Income (Million €)</b>									
Landings income	80.6	99.7%	50.0	89.7%	39.4	92.6%	68.0	93.8%	-51.1%
Direct subsidies	0	0%	0	0%	0.1	0.2%	0.05	0.1%	692.6%
Other income	0.2	0.3%	5.8	10.3%	3.1	7.2%	4.4	6.1%	1268.9%
Fishing rights income	0	0%	0	0%	0	0%	0	0%	
<i>Total Income</i>	80.9	100%	55.7	100%	42.6	100%	72.5	100%	-47.3%
<b>Expenditure (Million €)</b>									
Crew wages	8.1	10.0%	5.4	9.7%	4.4	10.4%	4.6	6.4%	-45.3%
Unpaid labour	0	0%	0.03	0.1%	0.04	0.1%	0.0	0.0%	
Energy costs	24.1	29.8%	11.5	20.6%	13.0	30.5%	14.7	20.3%	-46.2%
Repair costs	13.5	16.7%	9.0	16.2%	5.8	13.6%	5.5	7.5%	-57.1%
Variable costs	20.3	25.2%	17.7	31.8%	15.1	35.6%	14.3	19.8%	-25.5%
Non-variable costs	5.9	7.3%	4.4	7.9%	3.9	9.2%	3.5	4.8%	-33.8%
Rights costs	0	0%	0	0%	0	0%	0	0%	
<i>Total operating costs</i>	72.0	89.0%	48.1	86.2%	42.3	99.3%	42.6	58.8%	-41.2%
Depreciation costs	1.8	2.2%	2.0	3.6%	2.1	5.0%	2.1	2.8%	18.2%
Opportunity costs of capital	-2.7	-3.4%	4.9	8.7%	2.1	4.8%	1.4	1.9%	175.4%
<b>Performance Indicators (Million €)</b>									
Gross value added (GVA)	16.99	21.0%	13.13	23.6%	4.66	10.9%	34.48	47.6%	-72.5%
Gross profit	8.88	11.0%	7.69	13.8%	0.19	0.4%	29.83	41.2%	-97.9%
Net profit (incl. subsidies)	9.81	12.1%	0.84	1.5%	-3.9	-9.2%	27.82	38.4%	-139.8%
Net profit (excl. subsidies)	9.80	12.1%	0.84	1.5%	-4.0	-9.4%	27.77	38.3%	-140.9%
<b>Capital value (Million €)</b>									
Fleet depreciated replacement value	55.1	68.1%	51.7	92.7%	48	111.6%	49.61	68.4%	
Fishing rights	0		0		0				
Investments	n/a		0.13	0.2%	20.4	47.8%			
Financial position (%)	n/a		47.4		61.0				

(Source: EU Member States DCF data submissions)

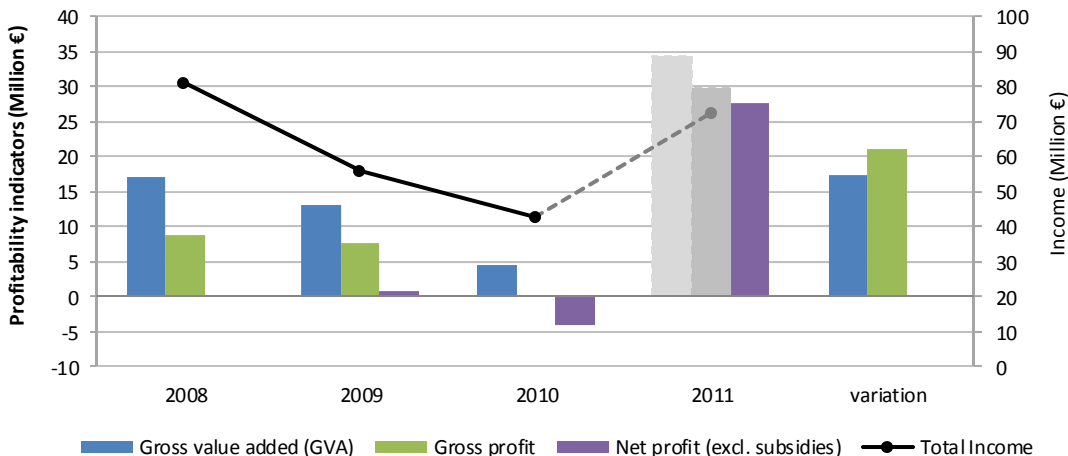


Figure 5.13.5 Lithuanian national fishing fleet economic performance trends: 2008-2011.  
(Source: EU Member States DCF data submissions)

#### 5.13.4 Fleet composition

The Lithuanian national fleet consisted of 5 fleet segments (below in the text are presented 4 of them due to confidentiality) in 2010. The Lithuanian fleet is highly diversified with a broad range of vessel types targeting different species predominantly in the Atlantic Ocean. There were 5 inactive length classes consisting of 83 vessels. These vessels are classed as inactive if they did not land any catch in 2010. Generally 2 of the active segments made losses in 2010 while 3 made an overall profit.

Table 5.13.3 provides a breakdown of key performance indicators for all Lithuanian fleet segments in 2010. A short description of the four most important segments in terms of total value of landings is provided below.

**A27/DTS/VL2440** – 18 active vessels make up this segment and are based predominantly in the Baltic Sea. These vessels target demersal species such as Atlantic cod and European flounder. The total value of landings was €3,4 million and around 130 FTEs were employed in this fleet segment in 2010, contributing to 84.4% and 59.2% of the total income from landings and FTEs generated by the MS fishing fleet, respectively. This fleet segment was slightly profitable, with reported profit of around €0,25 million in 2010 (fig. 5.13.6).

**A27/DFN/VL0010** – 63 active vessels make up this segment and are based predominantly in coastal area of Baltic Sea. These vessels target species such as Atlantic cod, Baltic herring, European flounder and European smelt. The total value of landings was €0,14 million and around 25 FTEs were employed in this fleet segment in 2010, contributing to 0,38% and 4,8% of the total income from landings and FTEs generated by the MS fishing fleet, respectively. This fleet segment had slight losses around €0,03 million in 2010 (fig. 5.13.7).

**A27/DFN/VL1218** – Around 14 active vessels make up this segment which operates predominantly in coastal area of the Baltic Sea. The fleet targets a variety of species, mainly Atlantic cod, Baltic herring and European flounder. The total value of landings was €0,62 million and around 25 FTEs were employed in this fleet segment in 2010, contributing to 1,34% and 4,8% of the total income from landings and FTEs generated by the MS fishing fleet, respectively. This fleet segment made a modest profit in 2010.

**OFR/TM/VL40XX** – 11 active vessels make up this segment and it mainly operates in Atlantic and Pacific Ocean. These vessels target predominantly pelagic species such as Cunene horse mackerels and Round sardinella. The total value of landings was €18.9 million and around 308 FTEs were employed in this fleet segment in 2010, contributing to 9% and 25% of the total income from landings and FTEs generated by the MS fishing fleet, respectively. This fleet segment had losses around €4.2 million in 2010.

Table 5.13.3 Lithuanian national fishing fleet composition and key indicators at fleet segment level for 2010.

Fleet Segment	Number of vessels	Vessel tonnage (GT)	Vessel power (kW)	Total employed	FTE (national)	Days at sea	Energy consumption (kilolitres)	Landings weight (tonnes)	Landings value (thousand €)	Direct Subsidies (thousand €)	GVA (thousand €)	Gross profit (thousand €)	Net profit (excl. subsidies) (thousand €)	Net Profit (incl. subsidies) (thousand €)
<b>DFN</b>	<b>77</b>	<b>455</b>	<b>2404</b>	<b>149</b>	<b>50</b>	<b>4827</b>	<b>170</b>	<b>710</b>	<b>760</b>	<b>71</b>	<b>288</b>	<b>118</b>	<b>55</b>	<b>125</b>
VL0010	63	75	1166	118	25	3896	31	199	143	71	61	-9	-33	38
VL1218	14	380	1237	31	25	931	139	511	617	0	227	128	88	88
<b>DTS</b>	<b>18</b>	<b>2115</b>	<b>3972</b>	<b>201</b>	<b>130</b>	<b>1524</b>	<b>1287</b>	<b>3057</b>	<b>3439</b>	<b>14</b>	<b>1338</b>	<b>551</b>	<b>238</b>	<b>252</b>
VL2440	18	2115	3972	201	130	1524	1287	3057	3439	14	1338	551	238	252
<b>TM</b>	<b>15</b>	<b>44643</b>	<b>45326</b>	<b>370</b>	<b>340</b>	<b>4294</b>	<b>61822</b>	<b>103775</b>	<b>55802</b>	<b>14</b>	<b>3038</b>	<b>-482</b>	<b>-4180</b>	<b>-4166</b>
VL40XX	11	43569	42846	326	308	3467	61038	92023	53893	0	2563	-754	-4250	-4250

(Source: EU Member States DCF data submissions)

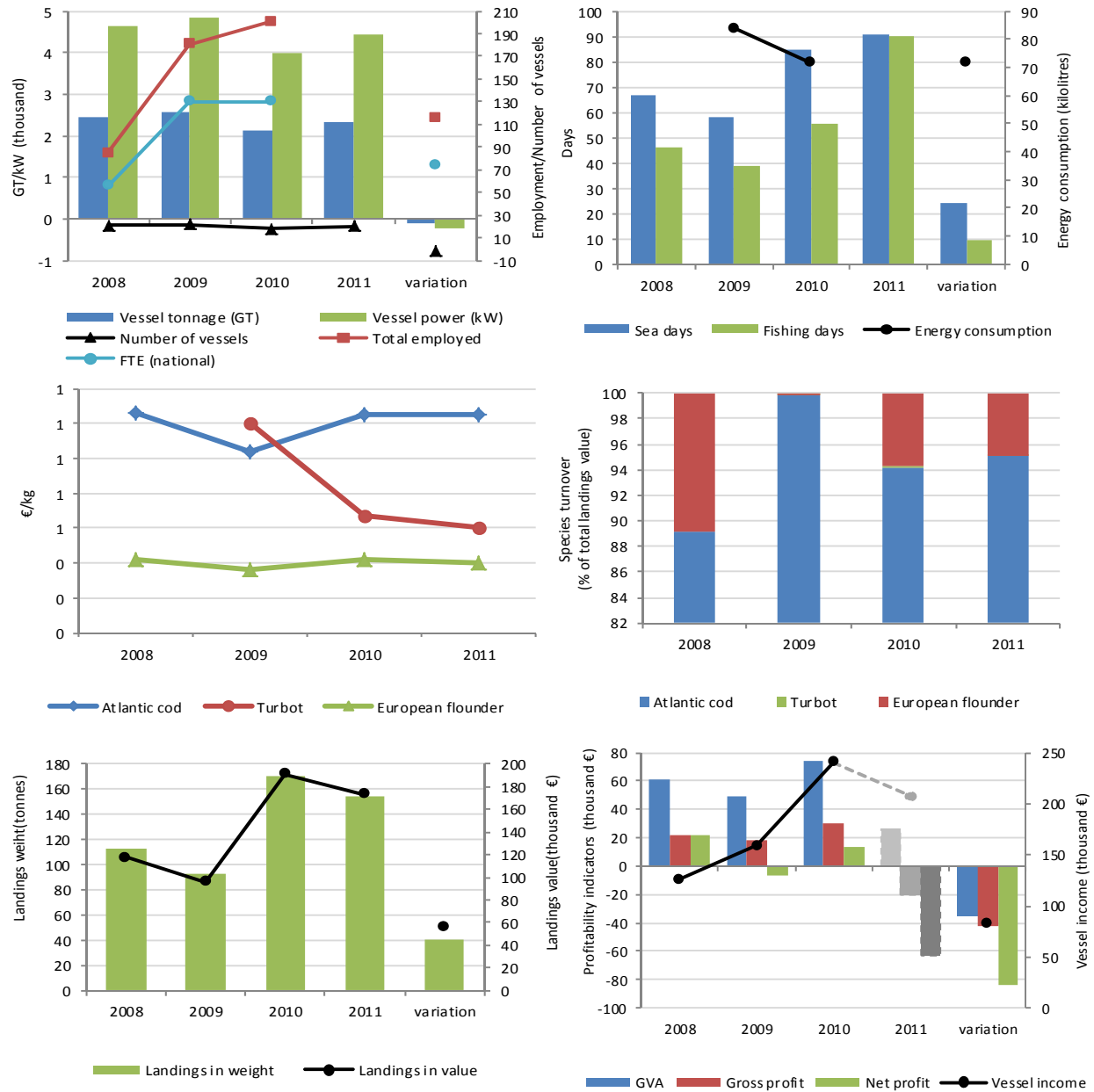


Figure 5.13.6 Key indicators for the average vessel in the Lithuanian DTS VL2440 fleet segment, 2008-2011: top left – fleet segment capacity and employment; top right – fishing activity and effort; middle left – average prices (€/kg) for key species; middle right - turnover as a percentage of total value of landings for key species; bottom left - landings in value and weight; bottom right –main economic indicators for the average vessel (variation 2010-2008)

(Source: EU Member States DCF data submissions)

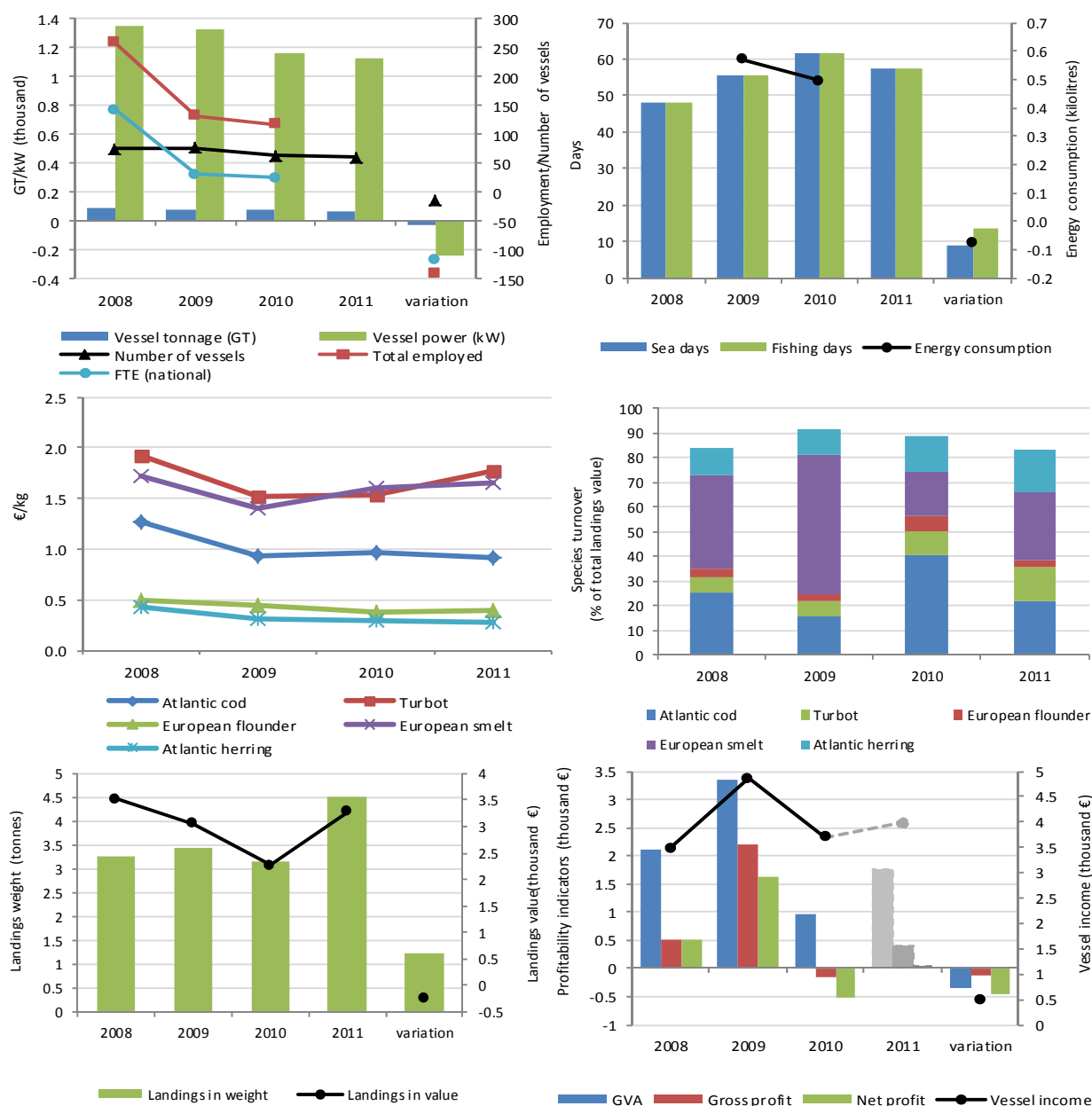


Figure 5.13.7 Key indicators for the average vessel in the Lithuanian DFN VL0010 fleet segment 2008-2011: top left – fleet segment capacity and employment; top right – fishing activity and effort; middle left – average prices (€/kg) for key species; middle right - turnover as a percentage of total value of landings for key species; bottom left - total landings in value and weight; bottom right – main economic indicators for the average vessel (variation 2010-2008)

(Source: EU Member States DCF data submissions)

### 5.13.5 Assessment for 2011 and 2012

The main Lithuanian fleet segments (area 27 drift and fixed nets 0-10m and area 27 demersal trawlers 24-40m) showed an increase in volume and value of landings, fishing days as well as prices of certain fish species, resulting in a 13,1% increase in landings income, from €3,27 million in 2009 to €3,7 million in

2010. In 2011 and 2012 the income from landings for the main fleet segments (targeting Atlantic cod and European flounder) are expected to rise moderately or at least remains at the current level, compare to 2010. Such outlook is based on the increased quotas for cod as a result of cod management plans along with good price expectations for cod in 2011 and 2012. Concerning the level of price, quite optimistic forecast is also foreseen for the vessels fishing pelagic species such as European sprat and Baltic herring in Baltic Sea. However quotas for such pelagic species for assessment period significantly decreased compare to 2010.

Total operating costs are expected to increase in 2011, mainly due to record high fuel prices, which directly affects energy costs as well as other variable costs that are oil price related. Repair and maintenance costs are expected to rise for demersal trawlers mainly due to the increasing age of the fleet and low rate of investments to fleet compare to other segments, such as pelagic trawlers or long distance fishery vessels.

#### **5.13.6 Data issues**

Value of landings for the long distance fishing vessels are relatively high compare to income from landings, because of different methodologies applied. Income from landings were collected from enterprises by census procedure (100% response rate) based on their accounts, whereas value of landings as a transversal variable were estimated from volume of landings and average price. Data for unpaid labour, investments, and energy consumption were not available for year 2008.



## 5.14 MALTA

### 5.14.1 National fleet structure

In 2012 the Maltese fishing fleet consisted of 1050 registered vessels, with a combined gross tonnage of 8.07 thousand GT, total power of 77.68 thousand kW and an average age of 26.5 years (Table 5.14.1). The size of the Maltese fishing fleet decreased between 2008 and 2012. The number of vessels decreased by 20% (or 266 vessels) while the total GT of the fleet increased by 8% and the total KW of the fleet decreased by 11%, during the same period (fig. 5.14.1).

Table 5.14.1 Maltese national fishing fleet key indicators: 2008-2012

	2008	2009	2010	2011	2012	% change
<b>Capacity</b>						
Number of vessels	1316	1111	1112	1087	1050	-20.2
Average vessel age	25	24	25	27	27	7.6
Gross Tonnage (GT, thousand)	7.5	8.3	12.3	12.1	8.1	8.0
Power (kW, thousand)	87.5	82.2	85.5	83.4	77.7	-11.2
<b>Effort</b>						
Days at sea (thousand)	47.0	48.3	65.4	41.3		-12.1
Fishing days (thousand)	47.0	48.2	65.4	54.3		15.6
Energy consumption (Million litres)	3.5	4.3	5.3			52.1
<b>Employment</b>						
Total Employed	134	196.02	360.71			169.9
FTE	88	154	256			190.9
<b>Landings</b>						
Weight (thousand tonnes)	1.3	1.6	1.8	1.9		49.9
Value (Million €)	8.2	8.6	8.8	11.4		39.2

(Source: EU Member States DCF data submissions)

The total number of fishing enterprises in the Maltese fleet was 1060 in 2011. The vast majority of fishing enterprises, 98%, owned a single vessel and 2% of enterprises owned two to five fishing vessels. No fishing enterprises owned six or more fishing vessels.

Total employment was around 361 jobs and 409 FTEs in the Maltese fleet in 2010. The level of employment increased between 2008 and 2010, with the total number employed increasing by 170% and the number of FTEs increasing by 138% over the time period (Table 5.14.1; fig. 5.14.1).

The number of jobs and FTEs has increased due to a change in the data collection procedure whereby employment levels are checked against the type of fishery/gear. If for example a particular fishery requires more than one person onboard (that is; other than the vessel owner), employment (or alternatively value of un-paid labour) must be present. Due to data checking procedural changes, the trend in employment has changed and, everything else remaining equal, the trends for these variables are expected to stabilise in future years.

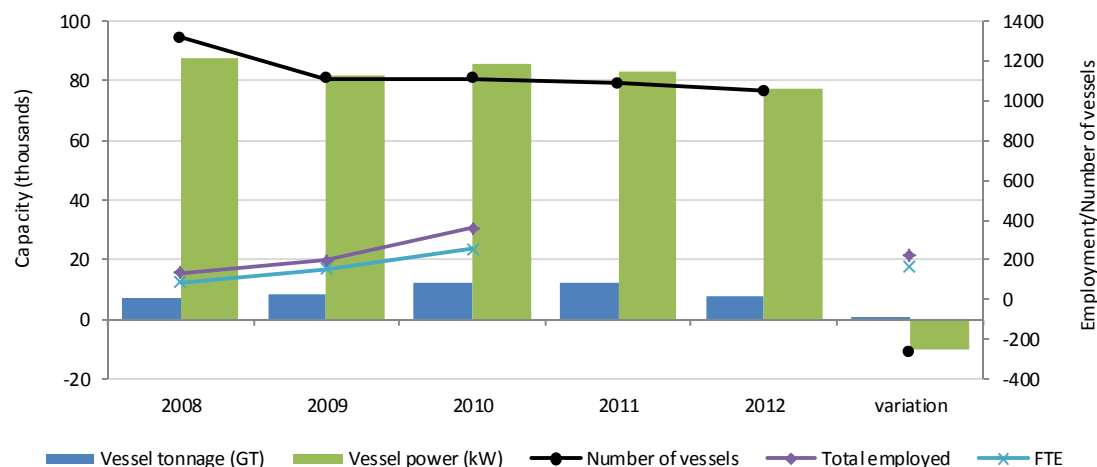


Figure 5.14.1 Maltese national fleet capacity and employment trends: 2008-2012  
(Source: EU Member States DCF data submissions)

### 5.14.2 National fleet fishing activity and output

In 2011 the Maltese fishing fleet spent a total of around 41 thousand days at sea (Table 5.14.1), 98% of which were actual fishing days. The total number of days at sea declined by around 12% between 2008 and 2011, while total fishing days decreased by 15% during the same period (fig. 5.14.2, left). The total quantity of fuel consumed in 2010 was 5 million litres, an increase of around 25% between 2008 and 2010 (fig. 5.14.2, left).

The total volume of landings achieved by the Maltese fleet in 2011 was 1.9 thousand tonnes of seafood. The total volume of landings has increased between 2008 and 2011 (fig. 5.14.2, right).

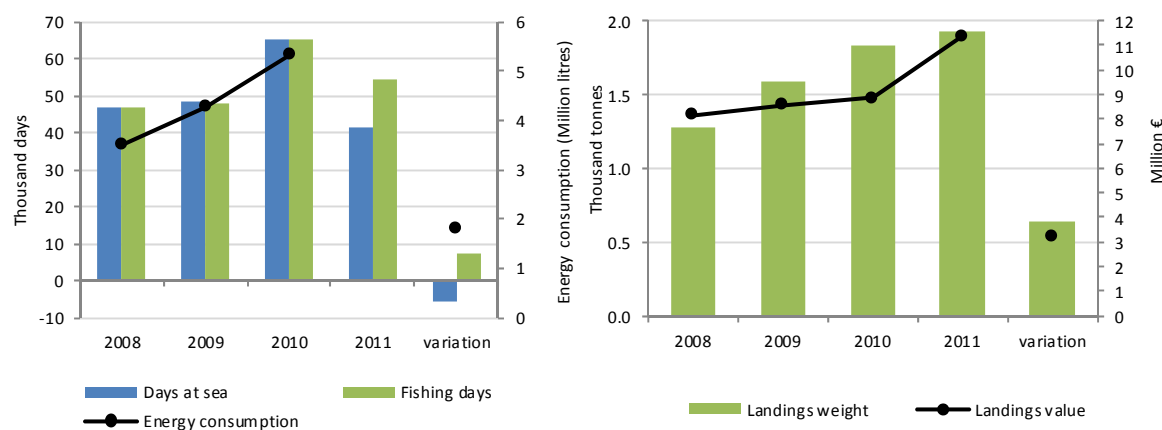


Figure 5.14.2 Maltese national fleet fishing effort (left) and landings trends (right): 2008-2011  
(Source: EU Member States DCF data submissions)

In 2011 Swordfish accounted for the highest value of landings (€3 million) by the national fleet, followed by Common dolphinfish (€1.6 million) and then Atlantic bluefin tuna (€1.1 million) (fig. 5.14.3, top).

In terms of landings composition, in 2011 Swordfish was the most common species landed in terms of volume (532 thousand tonnes), followed by Common dolphinfish (349 thousand tonnes) and Atlantic bluefin tuna (142 thousand tonnes) (fig. 5.14.3, bottom).

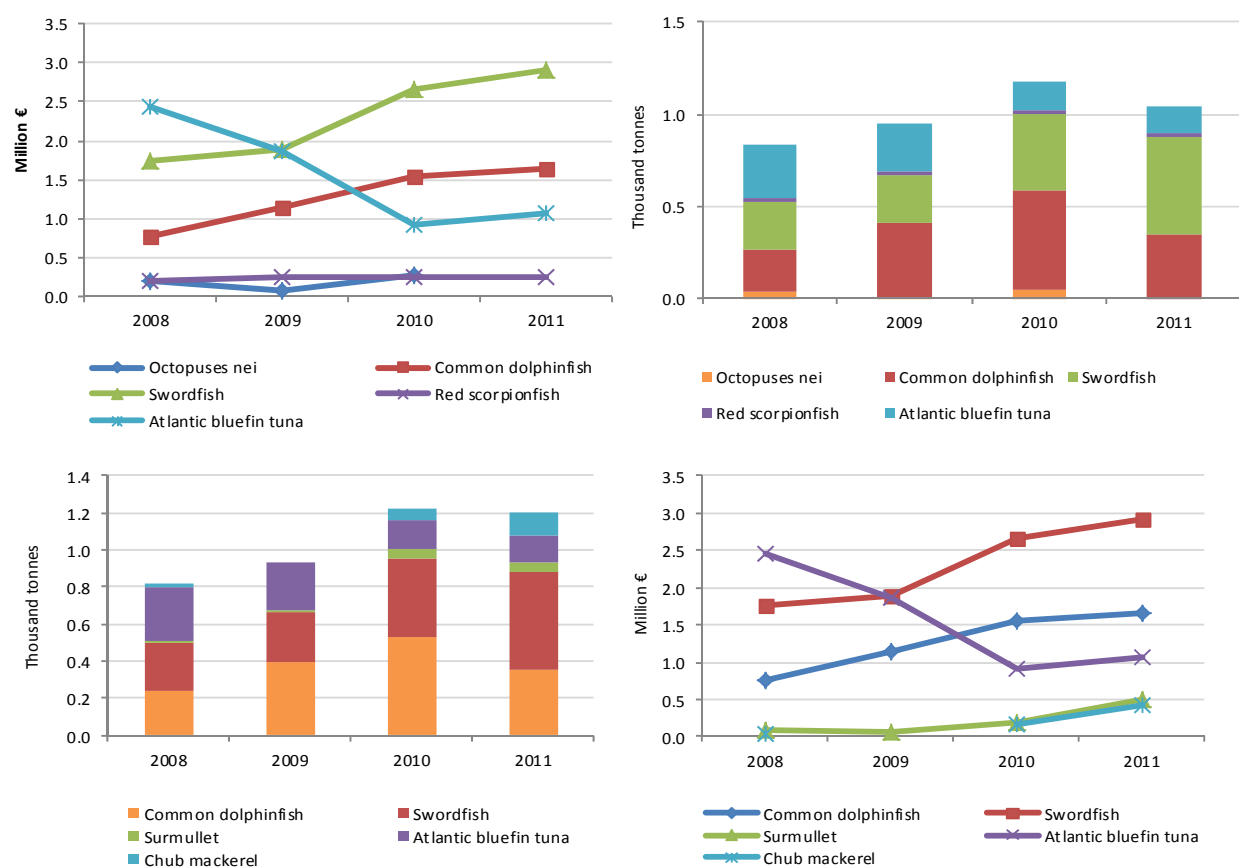


Figure 5.14.3 Maltese national fleet total landings by key species in value (top) and weight (bottom):2008-2011  
(Source: EU Member States DCF data submissions)

The prices obtained for these key species generally declined between 2008 and 2011. In 2011, Red scorpionfish achieved the highest average price per kilo by the Maltese national fleet (€13.72 per kg), followed by Atlantic bluefin tuna (€7.5 per kg) and Swordfish (€5.5 per kg) (fig. 5.14.4).

The largest change during 2011 in comparison with 2010 was the substantial decrease in landings volume of the Common dolphinfish, which decreased 34%. This decline may have been in part attributed to bad weather. This change in supply is reflected in an increased price per kg, which kept the total value of landings relatively stable. For the year 2011, the price per kg increased 62% when compared to the year 2010.

The second largest change was the increase of volume of Swordfish landings, which when compared to the year 2010, increased by 26%. As a consequence, prices slightly decreased, which was the reason why the total value of landings for this species increased by only 9.5%.

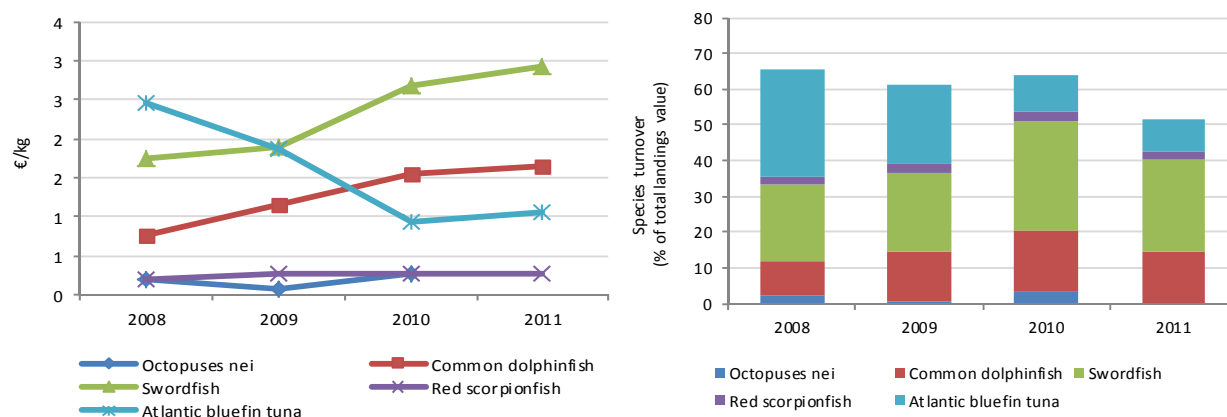


Figure 5.14.4 Total average price (left) and turnover as a percentage of total value of landings (right) for the five key species landed by the Maltese national fleet: 2008-2011  
(Source: EU Member States DCF data submissions)

### 5.14.3 National fleet economic performance

The total amount of income generated by the Maltese national fleet in 2010 was €9.8 million. This consisted of €9.2 million in landings values, €0.6 million in direct subsidies (Table 5.14.2). The total income of the Maltese fleet decreased 5% between 2008 and 2010 (fig. 5.14.5).

Total expenditure, including unpaid labour, annual depreciation and opportunity costs of capital by the Maltese national fleet in 2010 was €31.6 million. The largest expenditure items were annual depreciation and unpaid labour (€12.3 and €7.6 million, respectively) (Table 5.14.2). Between 2008 and 2010, the total expenditure of the Maltese increased by about 113%, fluctuating between €14.8 million in 2008 (excluding rights costs) and €31.6 million in 2010, largely due to increases in unpaid labour costs and a 137% increase in annual depreciation costs.

Drastic increase in the value of unpaid labour is due to a change in the data collection procedure whereby employment levels are checked against the type of fishery/gear. If for example a particular fishery surely requires more than one person on-board (that is, other than the vessel owner/skipper which is included in the calculation), value of unpaid labour (or alternatively paid employment) must be present. In addition, the hours of work on shore by the vessel owner and other non-paid labour are included in the calculation. On the other hand, the substantial increase in the annual depreciation cost is due to the change in the methodology used to calculate the variable. The Perpetual Inventory Method (PIM) was used from 2010 onwards.

In terms of profitability, the total amount of GVA, operating cash flow and economic loss including subsidies generated by the Maltese national fleet in 2010 was €1.3 million, -€0.6 million and -€21.7 million respectively (Table 5.14.2, fig. 5.14.5). In 2010, the Maltese fleet had an estimated capital value (based on depreciated replacement value) of €59 million and a rate of return on investment of -0.4%.

The Gross Value Added indicator is considered to be the most realistic as it incorporates variables both on the income and cost side which are directly related to the fishing activity. The indicator resulted in a positive value however when compared to the previous year it has substantially decreased. This is due to the fact that all costs which are incorporated in the calculation have increased in comparison to the year 2009.

The operating cash flow is slightly in the negative due to a higher level of expenditure mainly driven by higher crew and energy costs when compared to the year 2009. Higher crew costs are due to an increase in the level of employment while the increase in energy costs is due to an increase in the energy consumption resulting from an increase in days at sea.

Table 5.14.2 Maltese national fishing fleet economic performance indicators: 2008-2011.

Forecast figures for 2011 are highlighted in blue and values are also presented as a percentage of total income (shaded grey columns)

	2008	As % of total income	2009	As % of total income	2010	As % of total income	2011	As % of total income	% change (2010-08)
<b>Income (Million €)</b>									
Landings income	9.72	97.0%	7.51	93.5%	9.17	93.8%	11.37	95.3%	-5.7%
Direct subsidies	0.06	0.6%	0.02	0.2%	0.58	5.9%	0.30	2.5%	897.0%
Other income	0.24	2.4%	0.50	6.2%	0	0%	0.25	2.1%	-100.0%
Fishing rights income		0%	0.01	0.1%	0.03	0.3%	0.02	0.1%	
<i>Total Income</i>	10.03	100%	8.03	100%	9.78	100%	11.93	100%	-2.5%
<b>Expenditure (Million €)</b>									
Crew wages	1.12	11.2%	1.25	15.6%	2.44	25.0%	2.42	20.2%	117.7%
Unpaid labour	2.25	22.4%	9.16	114.0%	7.64	78.2%	10.98	92.0%	240.5%
Energy costs	1.89	18.9%	2.05	25.6%	3.55	36.4%	2.69	22.5%	88.1%
Repair costs	1.24	12.4%	0.94	11.7%	1.01	10.3%	0.64	5.3%	-18.9%
Variable costs	3.00	29.9%	2.36	29.4%	2.81	28.8%	1.78	14.9%	-6.1%
Non-variable costs	0.21	2.1%	0.18	2.2%	0.48	4.9%	0.47	3.9%	130.2%
Rights costs	0	0%	0.02	0.2%	0.10	1.1%	0.06	0.5%	
<i>Total operating costs</i>	9.70	96.8%	15.96	198.7%	18.04	184.6%	19.03	159.4%	86.0%
Depreciation costs	5.17	51.6%	3.51	43.7%	12.28	125.6%	7.90	66.2%	137.6%
Opportunity costs of capital	0.04	0.4%	1.07	13.4%	1.27	13.0%	0.80	6.7%	3095.3%
<b>Performance Indicators (Million €)</b>									
Gross value added (GVA)	3.63	36.2%	2.47	30.8%	1.32	13.5%	6.05	50.7%	-63.7%
Gross profit	0.26	2.6%	-7.94	-98.8%	-8.77	-89.7%	-7.35	-61.6%	-3424.5%
Net profit (incl. subsidies)	-4.89	-48.7%	-12.50	-155.7%	-21.75	-222.4%	-14.94	-125.2%	-345.0%
Net profit (excl. subsidies)	-4.94	-49.3%	-12.52	-155.9%	-22.32	-228.4%	-15.24	-127.7%	-351.5%
<b>Capital value (Million €)</b>									
Fleet depreciated replacement value	37.9	378.3%	39.9	496.6%	59.3	606.6%	49.6	416%	56.4%
Investments	0.87	8.7%	0.9	11.5%	1.4	14.3%			61%
Fishing rights			1.8	22.2%	1.7	17.1%			
Financial position (%)	24		48		42				75%

(Source: EU Member States DCF data submissions)

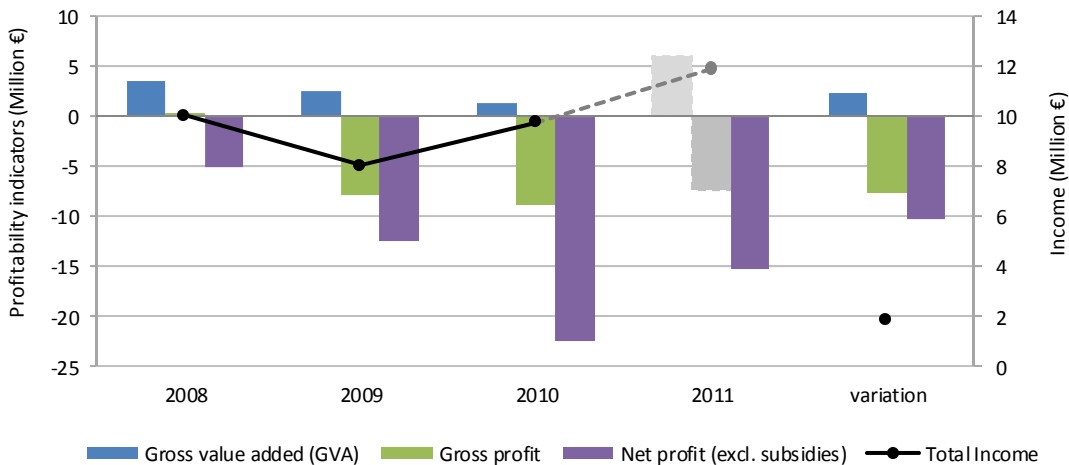


Figure 5.14.5 Maltese national fishing fleet economic performance trends: 2008-2011  
(Source: EU Member States DCF data submissions)

#### 5.14.4 Fleet composition

The Maltese national fleet consisted of 22 fleet segments in 2010. The Maltese fleet is highly diversified with a broad range of vessel types targeting different species predominantly AREA 37. There were 6 inactive length classes consisting of 114 vessels. These vessels are classed as inactive if they did not land any catch in 2010. None of the active segments made an overall profit in 2010.

Table 5.15.3 provides a breakdown of key performance indicators for all Maltese fleet segments in 2010. A short description of the two most important segments in terms of total value of landings and level of employment is provided below.

**DTS VL1824** – 15 vessels make up this segment and are based predominantly in AREA 37. These vessels target demersal species such as Golden Shrimp, Deep-water rose shrimp and Common cuttlefish. The total income from landings was €1.9 million and around 60 National FTEs were employed in this fleet segment in 2010, contributing to 21% and 15% of the total income from the sale of landings and National FTEs of the Maltese fishing fleet, respectively. This fleet segment was unprofitable, with reported losses of around €2.55 million in 2010 (fig. 5.14.6). The main drivers behind the loss are the high costs attributed to the opportunity cost of capital and the annual depreciation costs.

DTS VL1824 refers to the trawls segment and is one of the most economic important fleet segment, thus for this reason is characterised by a high value of income from landings. These vessels operate mainly in the 25 nautical mile (nm) in the permitted trawl zones and outside depending on their size and engine power, in the Geographical Sub Area 15. The length class of these vessels is also regulated and should not exceed 24 m in order to trawl within the 25 nm zone. For this reason most trawlers are smaller than 24 m and fall in the 18-24m segment.

Trawlers can be divided in 3 categories: 1) Trawlers targeting demersal slope species, mainly red shrimps (*Aristeomorpha foliacea* and *Aristeus antennatus*) all year round depending on the weather; 2) Trawlers targeting demersal species, mainly white shrimps (*Parapenaeus longirostris*), and red mullets (*Mullus barbatus* and *Mullus surmuletus*) also all year round; 3) A third group of vessels target both demersal slope and demersal shelf species.

Table 5.14.3 Maltese national fishing fleet composition and key indicators at fleet segment level for 2010

Fleet Segment	Number of vessels	Vessel tonnage (GT)	Vessel power (kW)	Total employed	FTE (national)	Days at sea	Energy consumption (kilolitres)	Landings weight (tonnes)	Landings value (thousand €)	Direct Subsidies (thousand €)	GVA (thousand €)	Gross profit (thousand €)	Net profit (excl. subsidies) (thousand €)	Net Profit (incl. subsidies) (thousand €)
<b>DFN</b>	<b>19</b>	<b>47</b>	<b>637</b>			<b>141</b>	<b>12</b>	<b>4</b>	<b>20</b>	<b>0</b>	<b>19</b>	<b>-49</b>	<b>-82</b>	<b>-82</b>
VL1218	1	23	112										-7	-7
VL0006	16	13	339			39	12	2	12		19	-49	-61	-61
VL0612	2	11	187			102		1	8				-14	-14
<b>DTS</b>	<b>22</b>	<b>3287</b>	<b>9586</b>	<b>53</b>	<b>42</b>	<b>1034</b>	<b>1668</b>	<b>186</b>	<b>808</b>	<b>0</b>	<b>63</b>	<b>-994</b>	<b>-4457</b>	<b>-4457</b>
VL1824	15	1683	6054	32	31	896	1474	162	615		12	-830	-2552	-2552
VL2440	7	1604	3532	21	10	138	194	24	194		50	-164	-1905	-1905
<b>FPO</b>	<b>12</b>	<b>24</b>	<b>542</b>				<b>12</b>				<b>-2</b>	<b>-43</b>	<b>-60</b>	<b>-60</b>
VL0006	8	6	175				3				-1	-24	-28	-28
VL0612	4	18	367				8				-1	-19	-33	-33
<b>HOK</b>	<b>149</b>	<b>2032</b>	<b>17743</b>	<b>146</b>	<b>126</b>	<b>3218</b>	<b>1769</b>	<b>610</b>	<b>3486</b>	<b>576</b>	<b>345</b>	<b>-2673</b>	<b>-4660</b>	<b>-4084</b>
VL1218	22	448	3303	42	40	925	434	220	1209	576	263	-486	-870	-294
VL1824	15	792	4579	63	56	914	767	252	1479		45	-433	-1243	-1243
VL2440	4	368	1526	14	8	2	204		1		-200	-1005	-1414	-1414
VL0006	44	45	1050	0	0	348	39	8	62		-37	-198	-242	-242
VL0612	64	379	7285	27	21	1029	325	131	734		274	-551	-891	-891
<b>MGO</b>	<b>23</b>	<b>366</b>	<b>3983</b>	<b>46</b>	<b>27</b>	<b>535</b>	<b>407</b>	<b>347</b>	<b>1057</b>	<b>0</b>	<b>235</b>	<b>-403</b>	<b>-764</b>	<b>-764</b>
VL1218	9	216	1872			279		205	633					
VL1824	1	50	298	24	17	50	258	62	178		203	-192	-465	-465
VL0006	1		8											
VL0612	12	100	1804	21	10	206	149	80	245		32	-211	-300	-300
<b>PGP</b>	<b>602</b>	<b>1068</b>	<b>26838</b>	<b>30</b>	<b>13</b>	<b>49955</b>	<b>730</b>	<b>347</b>	<b>1974</b>	<b>1</b>	<b>364</b>	<b>-3023</b>	<b>-3991</b>	<b>-3990</b>
VL0006	391	411	10899	8	4	32077	338	164	893	0	134	-1833	-2200	-2200
VL0612	211	657	15939	21	9	17878	391	183	1082	1	230	-1190	-1790	-1789
<b>PMP</b>	<b>169</b>	<b>740</b>	<b>14710</b>	<b>83</b>	<b>47</b>	<b>10447</b>	<b>686</b>	<b>267</b>	<b>1281</b>	<b>0</b>	<b>313</b>	<b>-1513</b>	<b>-2167</b>	<b>-2167</b>
VL1218	8	134	1427	8	7		149				104	-92	-198	-198
VL0006	20	22	328			835	12	6	39		3	-49	-67	-67
VL0612	141	584	12956	75	40	9612	524	260	1242		206	-1371	-1903	-1903
<b>PS</b>	<b>2</b>	<b>57</b>	<b>410</b>	<b>3</b>	<b>2</b>	<b>72</b>	<b>42</b>	<b>75</b>	<b>215</b>	<b>3</b>	<b>-20</b>	<b>-72</b>	<b>-94</b>	<b>-91</b>
VL1218	2	57	410	3	2	72	42	75	215	3	-20	-72	-94	-91

(Source: EU Member States DCF data submissions)

**PMP VL0612** – Around 141 vessels make up this segment and operate predominantly in AREA 37. The fleet targets a variety of species, such as common dolphinfish, Swordfish and Red Porgy. The total income from landings was around €1 million and around 75 people were employed in this fleet segment

in 2010, contributing to 11% and 21% of the total income from landings and number of engaged crew generated by the Maltese fishing fleet, respectively. This fleet segment made a loss in 2010 (fig. 5.14.7).

**PMP VL0612** refers to polyvalent vessels using active and passive gears. This segment is particularly important from a social point of view as in 2010 it represented the segment with the highest number of jobs. The reason for this is attributed to the fishery for common dolphinfish, which represents the highest value of landings in this segment. The fishery for this specie requires more than one person on board and thus is characterised by a high level of employment when compared to other fleet segments.

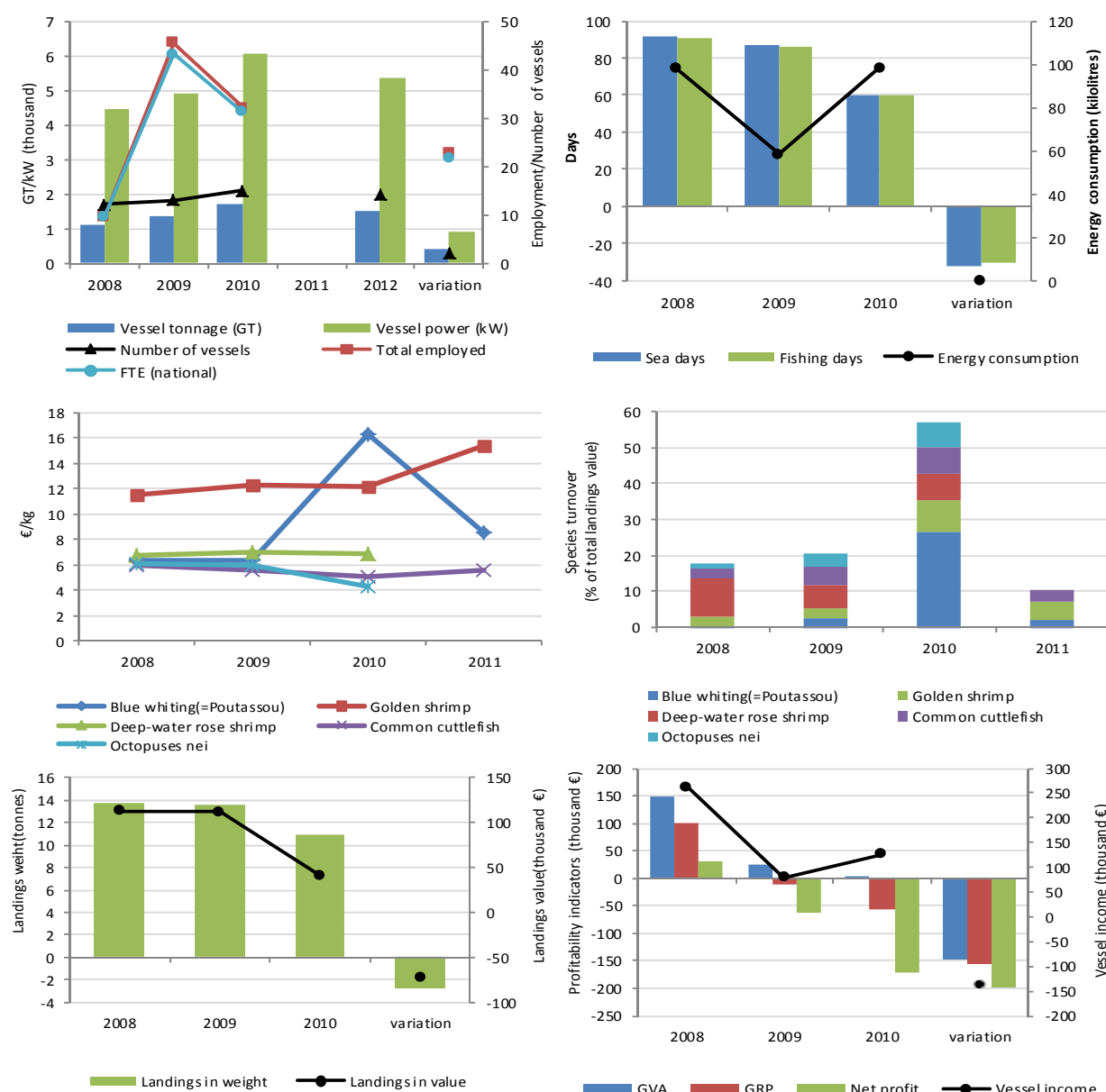


Figure 5.14.6 Key indicators for the average vessel in the Maltese DTS VL1824 fleet segment, 2008-2011: top left – fleet segment capacity and employment; top right – fishing activity and effort; middle left – average prices (€/kg) for key species; middle right - turnover as a percentage of total value of landings for key species; bottom left - landings in value and weight; bottom right – main economic indicators for the average vessel (variation 2010-2008) (Source: EU Member States DCF data submissions)



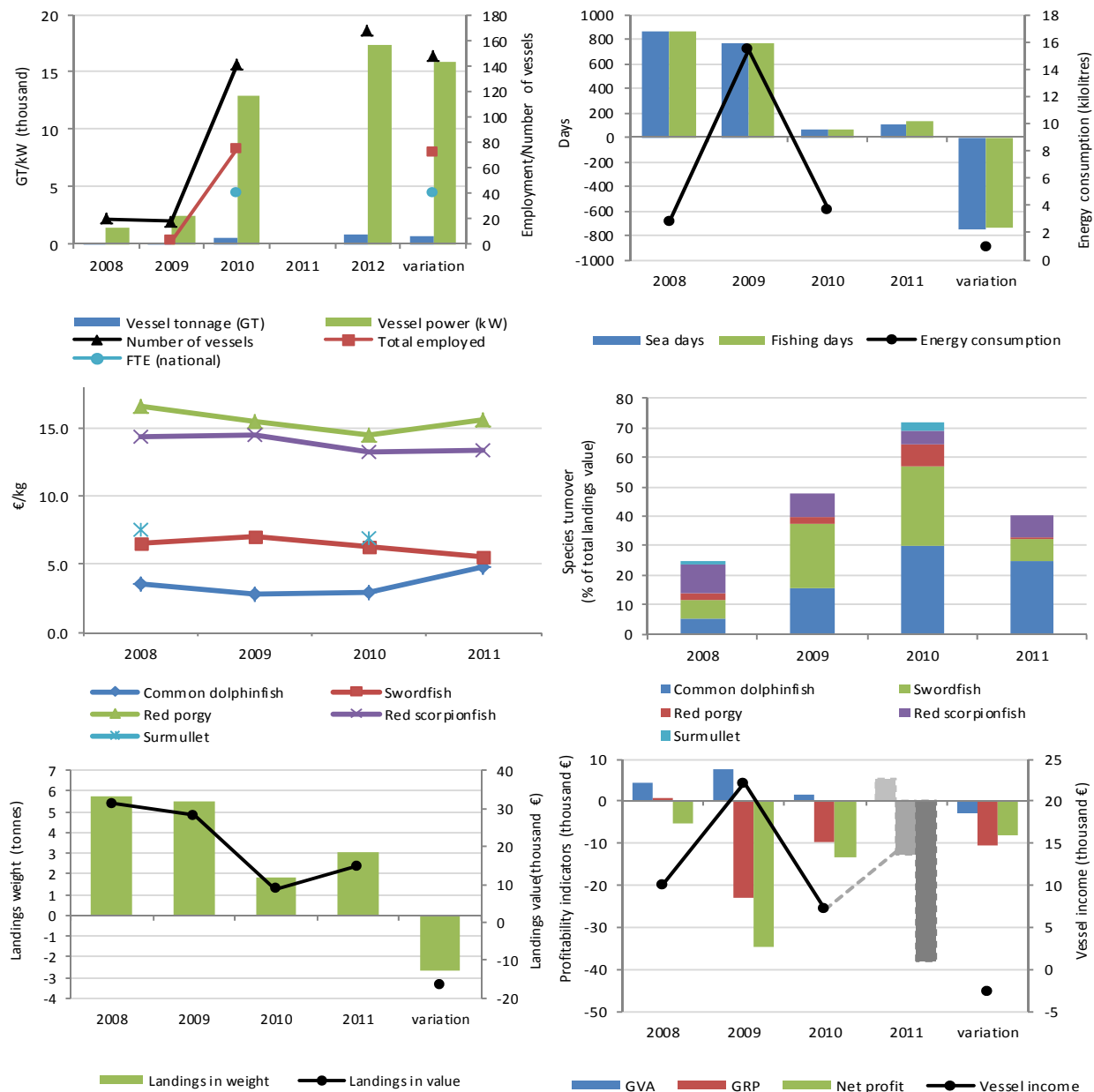


Figure 5.14.7 Key indicators for the average vessel in the Maltese PMP VL0612 fleet segment, 2008-2011: top left – fleet segment capacity and employment; top right – fishing activity and effort; middle left – average prices (€/kg) for key species; middle right - turnover as a percentage of total value of landings for key species; bottom left - total landings in value and weight; bottom right – main economic indicators for the average vessel (variation 2010-2008)

(Source: EU Member States DCF data submissions)

### 5.14.5 Assessment for 2011 and 2012

Overall, at the Maltese national fleet level, slight increases in landings volume and higher in average prices resulted in a 30% increase in the value of landings, from €8.8 million in 2010 to €11.4 million in 2011. Total operational costs for the year 2011 are expected to decline, consistent with the decrease in

effort (days at sea) which decreased by 37% between 2010 and 2011. Economic loss for the year 2011 is expected to decrease due to an expected increase in income from the sales of landings and the lower variable costs.

Most economic variables for the year 2012 are expected to remain stable; however fuel costs are expected to increase due to the substantial rise of fuel prices. As a consequence, profitability from this point of view is expected to be negatively affected.

#### **5.14.6 Data issues**

For the year 2010, a sampling plan was implemented in order to achieve the estimation of all population requested parameters. The technique of stratified random sampling was used whereby the sample was selected randomly from the total population. Direct interviews based on questionnaires were used to gather the data needed.

The sampling frame for the collection of economic data was based on the fishing vessel register information recorded in MALTASTAT, which is a reliable and efficient computerised fisheries statistics system that includes a register/inventory of all fishing vessels as well as on log books with information from catch and landings evaluation.

Data with regards to income from leasing out quota or other fishing rights, lease/rental payments for quota or other fishing rights and the value of quota and other fishing rights was collected for the first time for the year 2009. This is partly due to the fact that total allowable catch (TAC) for bluefin tuna was introduced in 2009.

As stated earlier the change in the calculation methodology of the capital value and depreciation costs has been the reason why there has been a substantial change in values. As from the year 2010, the PIM (Perpetual Inventory Method) started to be used. Considering everything else remains equal, the trend for depreciation costs is expected to stabilise in future years.

## 5.15 NETHERLANDS

### 5.15.1 National fleet structure

In 2012 the Dutch fishing fleet consisted of 740 registered vessels, with a combined gross tonnage of 133.7 thousand GT and total power of 286.5 thousand kW and an average age of almost 32 years (Table 5.15.1). The size of the Dutch fishing fleet has followed a decreasing trend between 2008 and 2012. The number of vessels increased slightly by 14 vessels (2%) while the total GT and kW of the fleet declined by 8% and 14%, respectively during the same period (fig. 5.15.1).

Since the year 2008, because of a decommissioning scheme, a considerable number of fishing vessels are scrapped from the register. Most of these vessels were in the range of 40 metres long with an engine power of 1.471 kW. On the other hand, small fishing vessels entered the fleet. These vessels have low capacity and fish limited days per year. This explains the slightly increase of number of vessels but the decline in tonnage and in power.

Table 5.15.1 Dutch national fishing fleet key indicators: 2008-2012

	2008	2009	2010	2011	2012	% change
<b>Capacity</b>						
Number of vessels	726	712	725	738	740	1.9
Average vessel age	31	32	33	33	32	4.1
Gross Tonnage (GT, thousand)	145.9	129.4	137.2	130.5	133.7	-8.3
Power (kW, thousand)	332.2	288.6	293.8	290.1	286.5	-13.8
<b>Effort</b>						
Days at sea (thousand)	50.5	49.2	50.8	44.8		-11.4
Fishing days (thousand)	44.3	43.1	44.6	35.3		-20.3
Energy consumption (Million litres)	246.9	156.6	146.1			-40.8
<b>Employment</b>						
Total Employed	5986	5900.63	6038.79			0.9
FTE	2200	2206.73	2205.46			0.3
<b>Landings</b>						
Weight (thousand tonnes)	388.5	335.3	381.6	261.7		-32.6
Value (Million €)	365.7	319.3	354.6	295.5		-19.2

(Source: EU Member States DCF data submissions)

The total number of fishing enterprises in the Dutch fleet was around 700 in 2011. The vast majority of fishing enterprises, 70%, owned a single vessel and 27% of enterprises owned two to five fishing vessels. Just 14 fishing enterprise owned six or more fishing vessels covered by the Dutch flag.

Total employment was around 6.000 jobs and 2.200 FTEs in the Dutch fleet in 2010. The level of employment remained about the same between 2008 and 2010 (Table 5.15.1; fig. 5.15.1).

Because of the decrease in vessels in the segment of 24-40 metres since 2008, employment in this segment also decreased. Average number of FTEs for these kind of vessels was around 6 or 7. Approximately 200 FTE were lost by the decrease in vessels in this segment over the last four years.

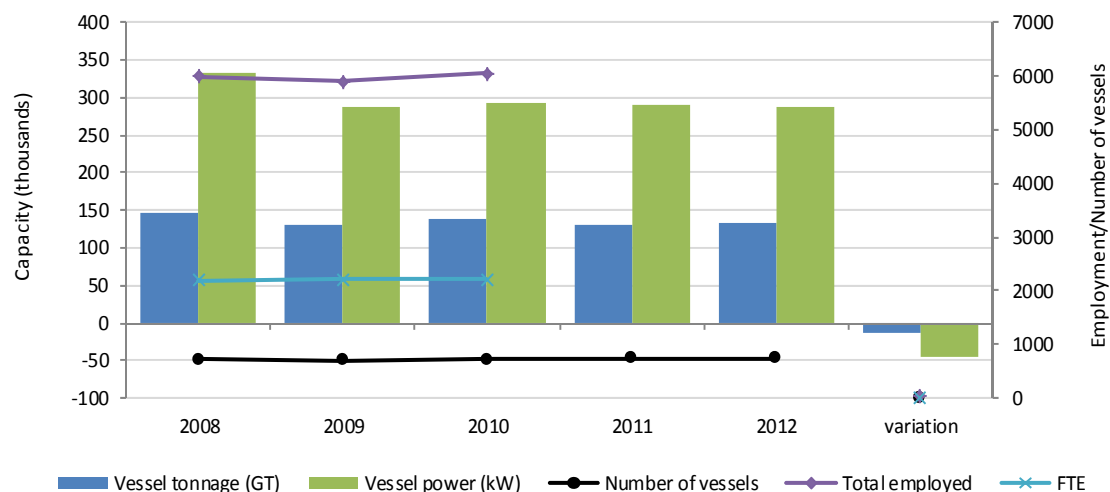


Figure 5.15.1 Dutch national fleet capacity and employment trends: 2008-2012  
(Source: EU Member States DCF data submissions)

### 5.15.2 National fleet fishing activity and output

In 2011 the Dutch fishing fleet spent a total of around 45 thousand days at sea (Table 5.16.1), 78% of which were actual fishing days. The total number of days at sea declined by around 11% between 2008 and 2011, while total fishing days decreased by 20% during the same period (fig. 5.15.2, left). The total quantity of fuel consumed in 2010 was 146 million litres, a decrease of around 40% between 2008 and 2010 (fig. 5.15.2, left).

The total volume of landings achieved by the Dutch fleet in 2011 was 262 thousand tonnes of seafood. The total volume of landings has declined between 2008 and 2011 with around 33% (fig. 5.15.2, right).

Quota of pelagic fish declined considerably since 2008. EU negotiations with Norway, the Faroes and Iceland about shared stocks and quota for blue whiting, herring and mackerel stuck and finally much lower quota were set for European countries for these stocks. Mainly as a result of this the total volume of landings of the Dutch fleet declined.

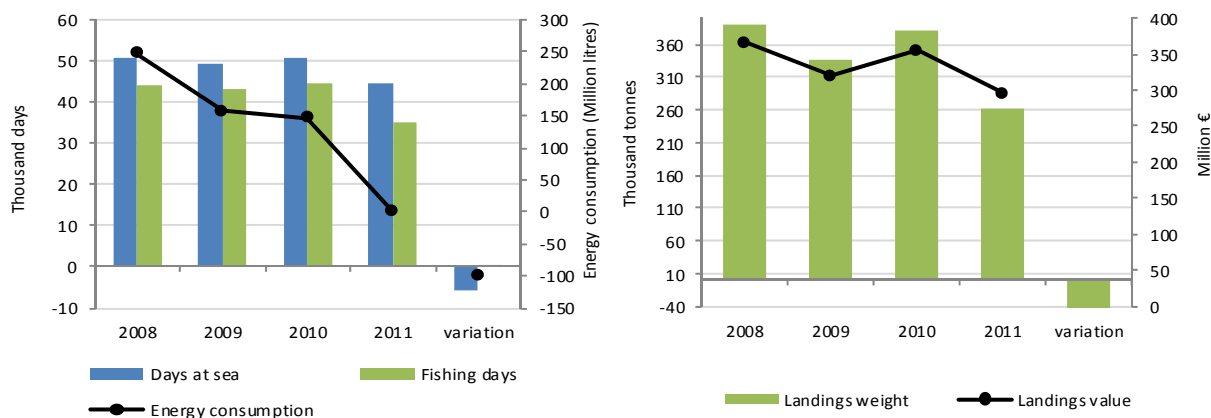


Figure 5.15.2 Dutch national fleet fishing effort (left) and landings trends (right): 2008-2011  
(Source: EU Member States DCF data submissions)

In terms of landings composition, in 2011 jack and horse mackerels was the most common species landed in terms of volume (63 thousand tonnes), followed by herring (41 thousand tonnes) and plaice (28 thousand tonnes) (fig. 5.15.3, left).

In 2011 sole accounted for the highest value of landings (€83 million) by the national fleet, followed by plaice (€37 million) and then jack and horse mackerel and shrimp (€29 million and €27 million respectively) (fig. 5.15.3, right).

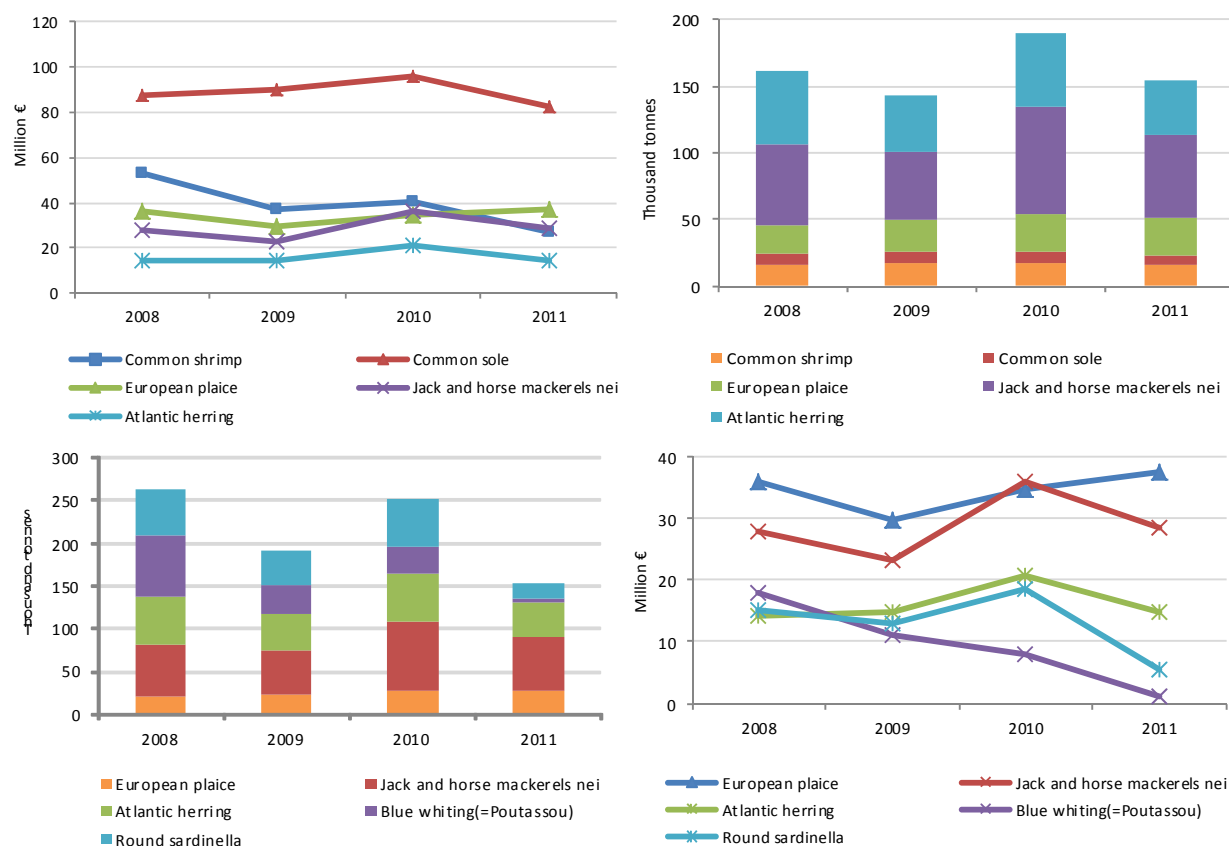


Figure 5.15.3 Dutch national fleet total landings by key species in value (top) and weight (bottom): 2008-2011  
(Source: EU Member States DCF data submissions)

The prices obtained for these key species generally decreased between 2008 and 2011. In terms of prices, in 2011 sole achieved the highest average price per kilo by the Dutch national fleet (€10.72 per kg), followed by shrimp (€1.72 per kg) and plaice (€1.34 per kg) (fig. 5.15.4, left). Prices of shrimp and plaice declined significantly since 2008 while prices for sole and also herring increased.

### 5.15.3 National fleet economic performance

The total amount of income generated by the Dutch national fleet in 2010 was €358.5 million. This consisted of €354.6 million in landings values, €3.7 million in fishing rights (rent), €0.2 million in non-fishing income, and €0 million in direct subsidies (Table 5.15.2). The total income of the Dutch fleet decreased 3% between 2008 and 2010 (fig. 5.15.5).

Total expenditure by the Dutch national fleet in 2010 was €294.8 million, amounting to 82% of total income. The largest expenditure items were crew wages (€81.4 million) and fuel costs (€92.4 million)

(Table 5.15.2). Between 2008 and 2010, the total expenditure of the Dutch fleet was fluctuating between €315 million and €266 million, largely due to changes in fuel costs (high prices) and revenues (low fish prices).

In terms of profitability, the total amount of GVA, gross profit and net profit (excluding subsidies) generated by the Dutch national fleet in 2010 was €136.6 million, €43.7 million and €-0,8 million respectively (Table 5.15.2). In 2010, the Dutch fleet had an estimated depreciated replacement value of €343 million, an estimated value of fishing rights of €235 million.

Table 5.15.2 Dutch national fishing fleet economic performance indicators: 2008-2011.

Forecast figures for 2011 are highlighted in blue and values are also presented as a percentage of total income (shaded grey columns)

	2008	As % of total income	2009	As % of total income	2010	As % of total income	2011	As % of total income	% change (2010-08)
<b>Income (Million €)</b>									
Landings income	365.7	99.0%	319.3	98.6%	354.6	98.9%	295.5	98.6%	-3.0%
Direct subsidies	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0%
Other income	1.4	0.4%	2.1	0.7%	0.2	0.1%	1.2	0.4%	-83.3%
Fishing rights income	2.2	0.6%	2.3	0.7%	3.7	1.0%	3.0	1.0%	65.8%
<b>Total Income</b>	<b>369.3</b>	<b>100%</b>	<b>323.7</b>	<b>100%</b>	<b>358.5</b>	<b>100%</b>	<b>299.7</b>	<b>100%</b>	<b>-2.9%</b>
<b>Expenditure (Million €)</b>									
Crew wages	87.0	23.6%	80.4	24.8%	83.8	23.4%	71.98	24.0%	-3.7%
Unpaid labour	8.8	2.4%	8.2	2.5%	9.1	2.5%	7.59	2.5%	3.5%
Energy costs	111.5	30.2%	71.7	22.2%	97.3	27.1%	102.49	34.2%	-12.8%
Repair costs	49.6	13.4%	54.0	16.7%	49.8	13.9%	43.83	14.6%	0.4%
Variable costs	31.9	8.6%	28.2	8.7%	31.1	8.7%	27.34	9.1%	-2.7%
Non-variable costs	42.9	11.6%	39.6	12.2%	40.1	11.2%	40.78	13.6%	-6.6%
Rights costs	6.2	1.7%	5.9	1.8%	5.4	1.5%	5.64	1.9%	-12.7%
<b>Total operating costs</b>	<b>338.0</b>	<b>91.5%</b>	<b>288.0</b>	<b>89.0%</b>	<b>316.5</b>	<b>88.3%</b>	<b>299.65</b>	<b>100.0%</b>	<b>-6.3%</b>
Depreciation costs	32.6	8.8%	29.9	9.2%	37.4	10.4%	33.64	11.2%	14.9%
Opportunity costs of capital	7.6	2.1%	11.4	3.5%	7.1	2.0%	8.71	2.9%	-6.4%
<b>Performance Indicators (Million €)</b>									
Gross value added (GVA)	131.12	35.5%	127.89	39.5%	136.61	38.1%	82.27	27.5%	4.2%
Gross profit	35.28	9.6%	39.35	12.2%	43.72	12.2%	2.71	0.9%	23.9%
Net profit (incl. subsidies)	-4.90	-1.3%	-1.95	-0.6%	-0.81	-0.2%	-30.93	-10.3%	83.5%
Net profit (excl. subsidies)	-4.90	-1.3%	-1.95	-0.6%	-0.81	-0.2%	-30.93	-10.3%	83.5%
<b>Capital value (Million €)</b>									
Fleet depreciated replacement value	382.6	103.6%	429.1	132.5%	343.2	95.7%	386.2	129%	-10.3%
Fishing rights	260.1	70.4%	265.7	82.1%	234.7	65.5%			
Investments	23.2	0.1	68.8	0.2	28.1	0.1			
Financial Position (%)	73		154						

(Source: EU Member States DCF data submissions)

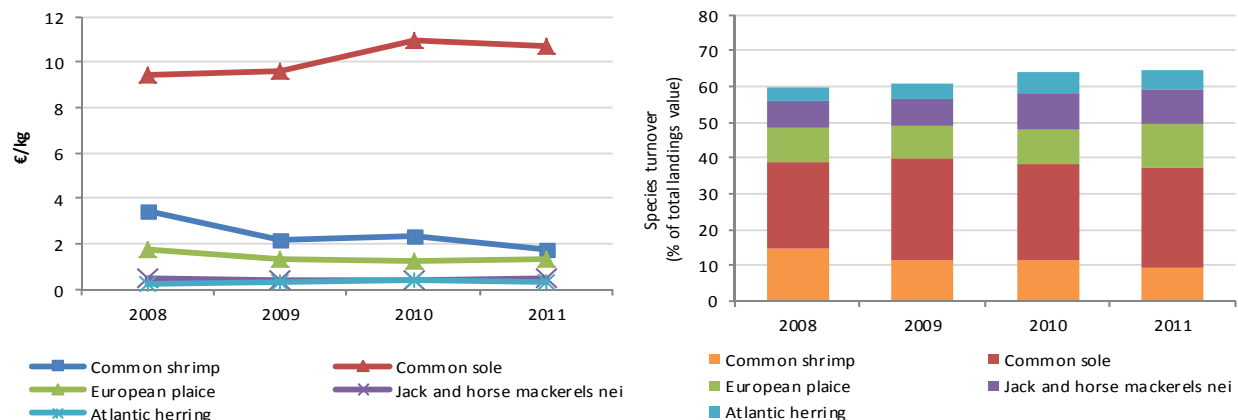


Figure 5.15.4 Total average price (left) and turnover as a percentage of total value of landings (right) for the five key species landed by the Dutch national fleet: 2008-2011  
(Source: EU Member States DCF data submissions)

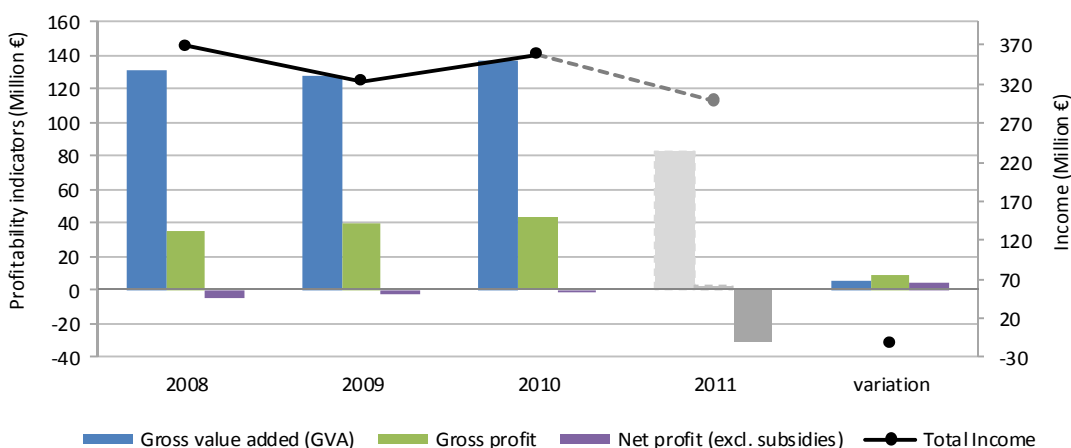


Figure 5.15.5 Dutch national fishing fleet economic performance trends: 2008-2011  
(Source: EU Member States DCF data submissions)

#### 5.15.4 Fleet composition

The Dutch national fleet consisted of 6 fleet segments in 2010. The Dutch fleet is highly diversified with a broad range of vessel types targeting different species predominantly in AREA 27, the North Sea. There was 1 inactive length class consisting of 207 vessels. These vessels are classed as inactive if they did not land any catch in 2010. Two of the active segments made losses in 2010 while three made an overall profit.

Table 5.15.3 provides a breakdown of key performance indicators for all Dutch fleet segments in 2010. A short description of the five most important segments in terms of total value of landings is provided below.

**Fleet segment TBB** – 280 vessels make up this segment and are based predominantly in the North sea and coastal waters. A number of vessels target demersal species such as sole and plaice but other vessels target shrimp. The total value of landings was €196 million and around 1275 FTEs were employed in this fleet segment in 2010, contributing to 55% and 64% of the total income from landings

and FTEs generated by the Dutch fishing fleet, respectively. This fleet segment was profitable, with reported profits of around €19 million in 2010 (Table 5.15.3, fig 5.15.6).

Table 5.15.3 Dutch national fishing fleet composition and key indicators at fleet segment level for 2010

Fleet Segment	Number of vessels	Vessel tonnage (GT)	Vessel power (kW)	Total employed	FTE (national)	Days at sea	Energy consumption (kilolitres)	Landings weight (tonnes)	Landings value (thousand €)	Direct Subsidies (thousand €)	GVA (thousand €)	Gross profit (thousand €)	Net profit (excl. subsidies) (thousand €)	Net Profit (incl. subsidies) (thousand €)	Cluster
DRB	16	1205	3853	37	49	380	179	2058	6370	0	5857	4759	4488	4488	
VL0010	16	1205	3853	37	49	380	179	2058	6370	0	5857	4759	4488	4488	CLUSTER4
DTS	59	5933	15845	367	195	6083	14104	11183	29018	0	12236	4844	2008	2008	
VL0010	27	287	1488	15	1	68	900	49	74	0	-4	-62	-109	-109	CLUSTER2
VL1824	12	1319	2612	162	77	2000	3848	2947	7008	0	2718	704	-154	-154	
VL2440	20	4327	11745	191	117	4015	9356	8186	21936	0	9522	4202	2271	2271	CLUSTER3
PG	207	1423	17340	334	184	3957	132	2221	8612	0	2043	-704	-1960	-1960	
VL0010	207	1423	17340	334	184	3957	132	2221	8612	0	2043	-704	-1960	-1960	CLUSTER5
PGP	5	185	592			32				0					
VL1218	5	185	592			32				0					CLUSTER6
TBB	280	49366	156725	1946	1275	37368	124266	64857	195804	0	86083	37140	18778	18778	
VL1218	12	579	2160	26	27	920	408	807	1908	0	1017	352	35	35	CLUSTER1
VL1824	170	10800	33424	733.96	582.76	18637	20733	19145	46356	0	19291	1044	-4944	-4944	
VL2440	34	7451	27440	400.9	235.86	4960.7	17770	8826	26132	0	9507	3214	1841	1841	
VL40XX	64	30536	93701	785.54	429.53	12849	85355	36079	121408	0	56268	32531	21847	21847	
TM	13	72821	78155	3354	502	3025	7407	301291	114827	0	30389	-2323	-25556	-25556	
VL40XX	13	72821	78155	3354	502	3025	7407	301291	114827	0	30389	-2323	-25556	-25556	
Clusetr Name	Clustered Fleet segments														
CLUSTER1	TBB VL0010		TBB VL1218												
CLUSTER2	DTS VL0010		DTS VL1012		DTS VL1218		TM VL1012								
CLUSTER3	DTS VL2440														
CLUSTER4	DRB VL0010		DRB VL1218		PS VL2440		PS VL0010		PS VL1012						
CLUSTER5	DFN VL0010		FPO VL0010		FPO VL1824		PG VL0010		PG VL1012		PG VL1218		PG VL1824		PG VL2440
CLUSTER6	PGP VL1218		PGP VL1824												

(Source: EU Member States DCF data submissions)

**Fleet segment TM VL40XX** – Around 13 vessels make up this segment and operate predominantly in the Atlantic Ocean, international waters, African waters and in the North sea. The fleet targets a variety of species, such as jack and horse mackerel, herring, mackerel and sardinella. The total value of landings was €115 million and around 502 FTEs were employed in this fleet segment in 2010, contributing to 32% and 26% of the total income from landings and FTEs generated by the MS fishing fleet, respectively. This fleet segment made a large loss in 2010 of €26 million (fig. 5.15.7).

**Fleet segment DTS** – 59 vessels make up this segment and are based predominantly in the North sea and in the English Channel. These vessels target demersal species such as Nephrops and plaice and some of them target gurnard and mullet. The total value of landings was €29million and around 195 FTEs were employed in this fleet segment in 2010, contributing to 8% and 10% of the total income from landings



and FTEs generated by the Dutch fishing fleet, respectively. This fleet segment was highly unprofitable, with reported losses of around €5 million in 2010.

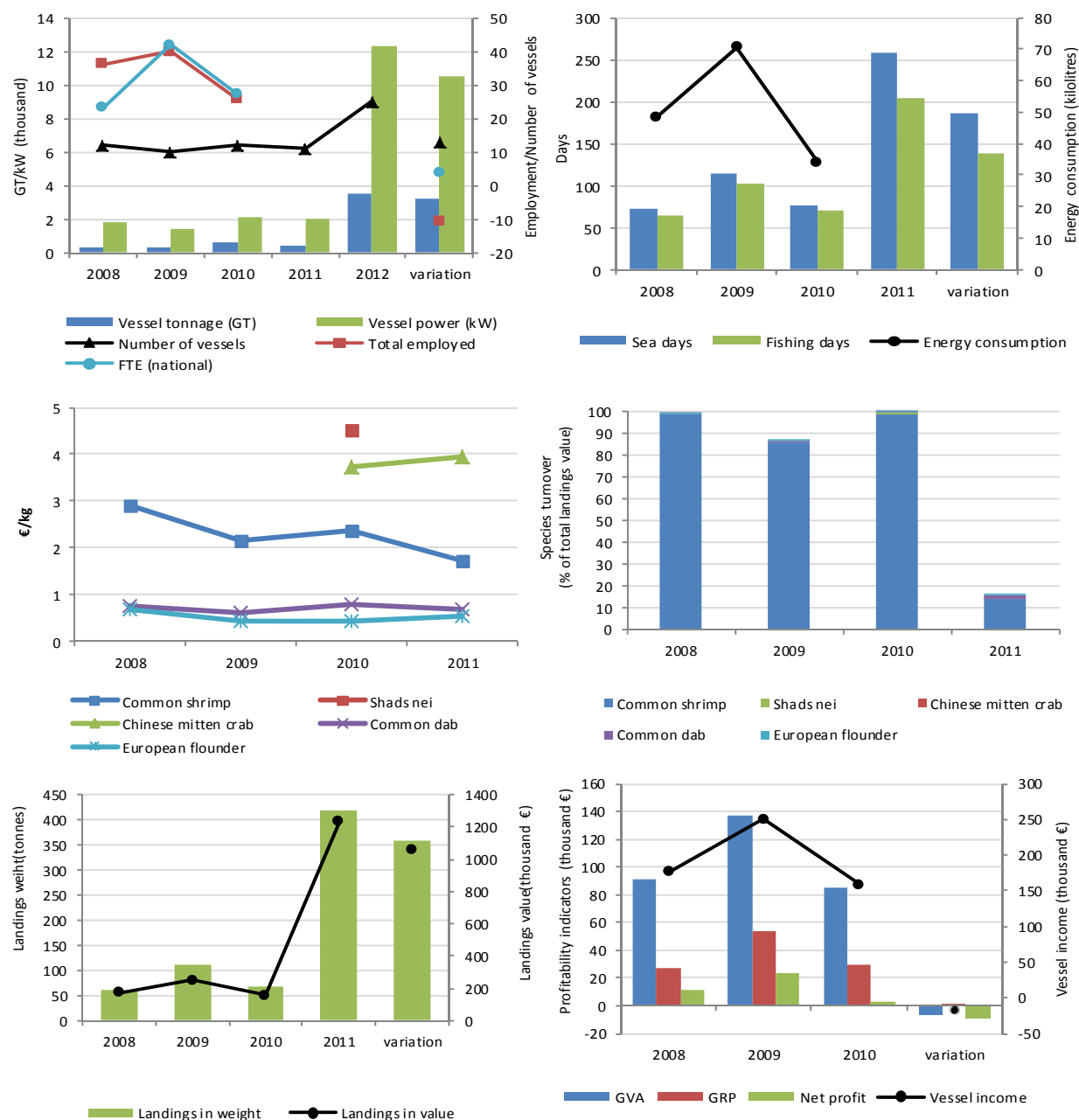


Figure 5.15.6 Key indicators for the average vessel in the Dutch TBB VL1218 fleet segment, 2008-2011: top left – fleet capacity and employment; top right – fishing activity and effort; middle left – average prices (€/kg) for key species; middle right - turnover as a percentage of total value of landings for key species; bottom left - landings in value and weight; bottom right –main economic indicators for the average vessel (variation 2010-2008)

(Source: EU Member States DCF data submissions)

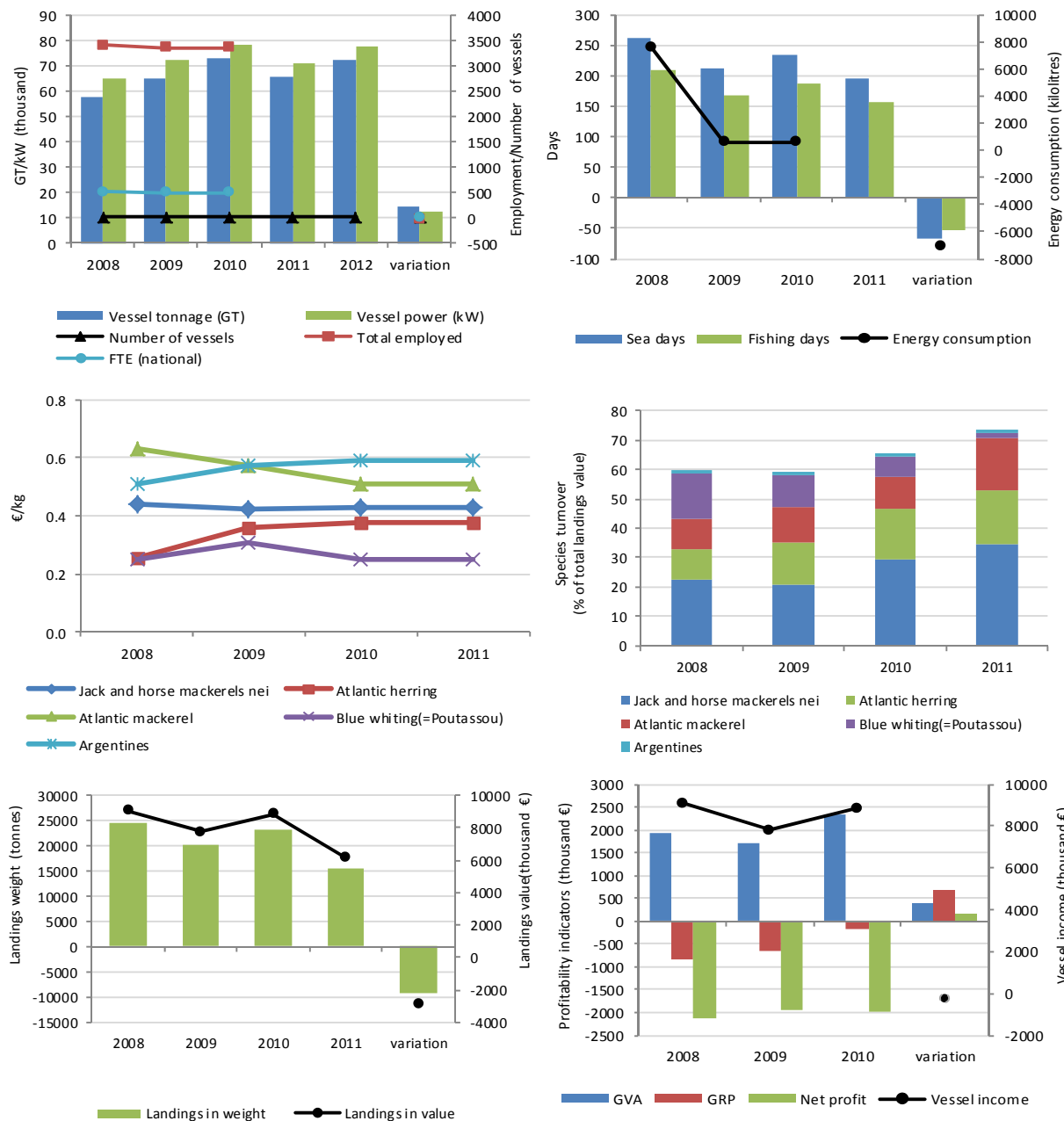


Figure 5.15.7 Key indicators for the average vessel in the Dutch TM VL40XX fleet segment 2008-2011:

top left – fleet capacity and employment; top right – fishing activity and effort; middle left – average prices (€/kg) for key species; middle right - turnover as a percentage of total value of landings for key species; bottom left - total landings in value and weight; bottom right –main economic indicators for the average vessel (variation 2010-2008)

(Source: EU Member States DCF data submissions)

### 5.15.5 Assessment for 2011 and 2012

Overall, at the Dutch fleet level declines in landings and average prices are estimated to have resulted in a 18% decrease in income, from €355 million in 2010 to €295 million in 2011. Total operation costs are

expected to have increased by 5%, mainly due to an increase of fuel prices and therefore also fuel costs. Effort in days at sea and fishing days decreased. Wages are lower because of lower income and higher fuel costs (dependency). Gross profit, GVA and net profit are expected to decrease in 2011. For 2012 it is expected that volume of landings will decrease again while prices for fish will generally be slightly higher. Total value of landings will be about the same, around €300 million while operation costs also will remain about the same because of projects saving fuel, the use of other fishing methods and techniques. Within one segment (TBB) the variation in results will be considerable. Some vessels will make considerable profits and others considerable losses.

#### **5.15.6 Data issues**

No major data issues.



## 5.16 POLAND

### 5.16.1 National fleet structure

In 2012 the Polish fishing fleet consisted of 790 registered vessels, with a combined gross tonnage of 83 thousand GT and total power of 83 thousand kW and an average age of 29 years (Table 5.16.1). The size of the Polish fishing fleet has followed a decreasing trend between 2008 and 2012. The number of vessels declined 11% (or 93 vessels). The total GT and kW of the fleet decreased 27% and 24% respectively during the same period (fig. 5.16.1). The observed changes can be explained by the fleet decommissioning program implemented after Poland's accession to EU (2004) and continued until 2011.

Table 5.16.1 Polish national fishing fleet key indicators: 2008-2012

	2008	2009	2010	2011	2012	% change
<b>Capacity</b>						
Number of vessels	883	877	823	805	790	-10.5
Average vessel age	27	28	27	28	29	4.8
Gross Tonnage (GT, thousand)	45.7	49.1	38.4	38.0	33.4	-27.0
Power (kW, thousand)	108.6	106.4	91.7	88.1	82.9	-23.7
<b>Effort</b>						
Days at sea (thousand)	70.4	65.8	62.1	58.6		-16.8
Fishing days (thousand)	62.5	59.8	55.5	57.0		-8.9
Energy consumption (Million litres)	16.0	12.5	12.4			-22.1
<b>Employment</b>						
Total Employed	2675	2201.79	2123.88			-20.6
FTE	1351	1306.65	1267.7			-6.1
<b>Landings</b>						
Weight (thousand tonnes)	126.2	212.1	170.8	179.9		42.6
Value (Million €)	34.8	37.3	40.0	46.0		32.5

(Source: EU Member States DCF data submissions)

The total number of fishing enterprises in the Polish fleet was 679 in 2011. The vast majority of fishing enterprises (87%) owned a single vessel and 13% of enterprises owned two to five fishing vessels. Only 3 fishing enterprises owned six or more fishing vessels. The change in number of enterprises between 2008 and 2010 followed the declining capacity trend of the Polish fleet.

Total employment was around 2.1 thousand jobs and 1.3 thousand FTEs in the Polish fleet in 2010. The level of employment decreased between 2008 and 2010, with the total number employed decreasing by 21% and the number of FTEs decreasing by 6% over the time period (Table 5.16.1; fig. 5.16.1).

Changes in employment level followed trends in the fishing vessel numbers. It is interesting to note that the negative change in total number of people employed was much higher than FTE, which may indicate that the average working time for people employed has increased. This, if continued, may cause problems with hiring crew in the future.

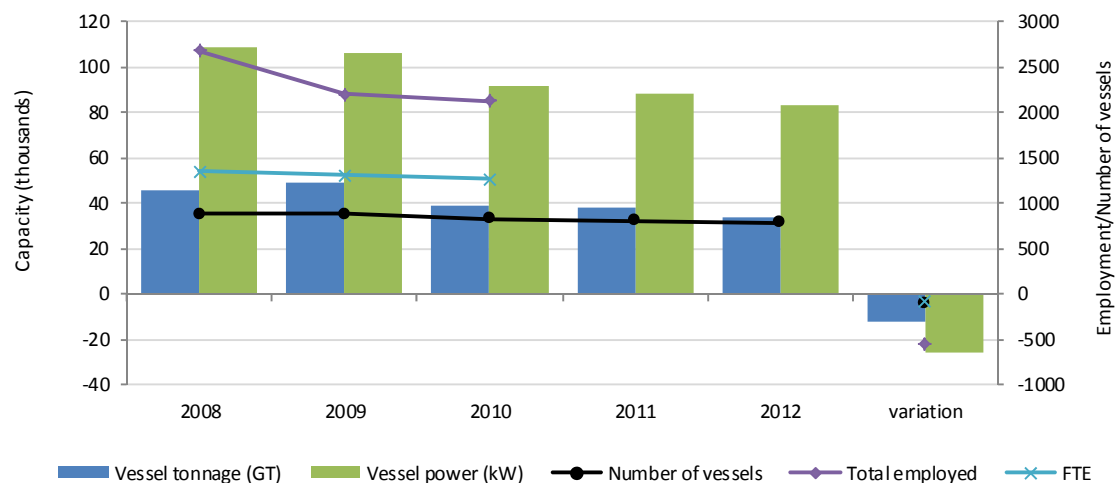


Figure 5.16.1 Polish national fleet capacity and employment trends: 2008-2012  
(Source: EU Member States DCF data submissions)

### 5.16.2 National fleet fishing activity and output

In 2011 the Polish fishing fleet spent a total of around 59 thousand days at sea (Table 5.16.1), 97% of which were actual fishing days. The total number of days at sea declined by around 17% between 2008 and 2011, while total fishing days decreased during the same period by 6% (fig. 5.16.2, left). The total quantity of fuel consumed in 2010 was 12 million litres, a decrease of around 22% between 2008 and 2010 (fig. 5.16.2, left).

The total volume of landings achieved by the Polish fleet in 2011 was 180 thousand tonnes of seafood. The total volume of landings has increased between 2008 and 2011 (fig. 5.16.2, right).

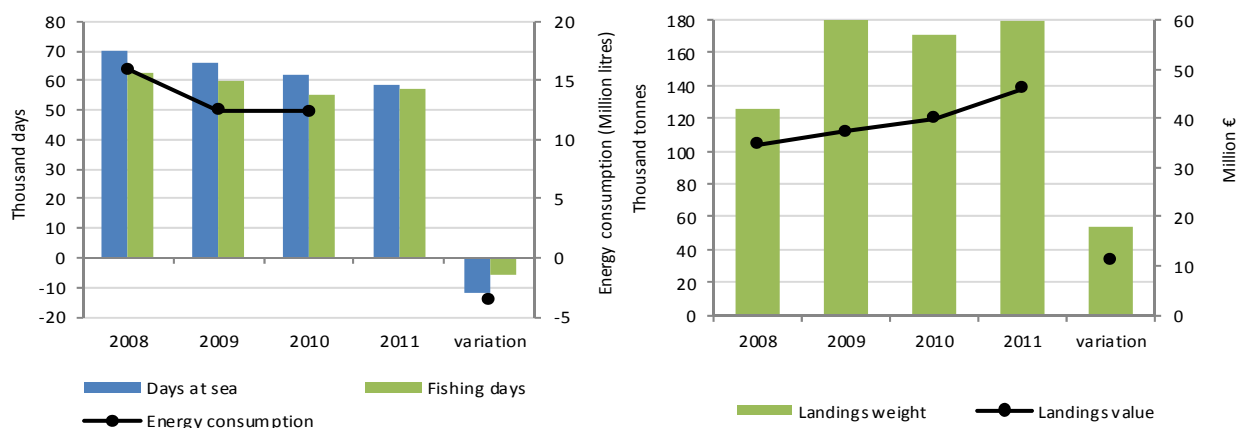


Figure 5.16.2 Polish national fleet fishing effort (left) and landings trends (right): 2008-2011  
(Source: EU Member States DCF data submissions)

The main factor that influenced fishing effort is the same as in the case of capacity changes i.e. reduced, by decommissioning programme, number of vessels. Another reason why the number of days at sea decreased was the high fuel price. In order to save fuel costs vessels try to use trip time as effectively as possible, or decide to shorten distances to fishing grounds. At the same time the volume and value of

landings increased. Fluctuating deep-sea catches (outside FAO 27.3.d area) were the main cause of changes in landings volume. Increased landings value (data excludes deep-sea fleet) was due to higher cod landings (increased TAC) and higher prices for pelagic species (in 2011).

In terms of the Polish fleet Baltic landings composition, in 2011 European sprat was the most common species landed in terms of volume (56 thousand tonnes), followed by Atlantic herring (30 thousand tonnes) and Atlantic cod (12 thousand tonnes) (fig. 5.16.3, left). In 2011 Atlantic cod accounted for the highest value of Baltic landings (€16.8 million) by the national fleet, followed by European sprat (€11.2 million) and then Atlantic herring (€10.8 million) (fig. 5.16.3, right).

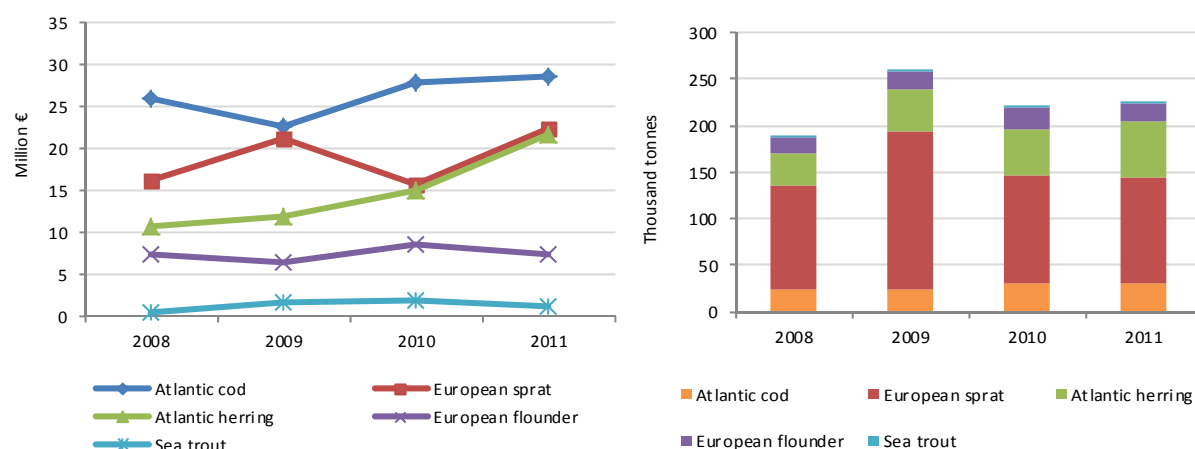


Figure 5.16.3 Polish national fleet total landings by key species in value (left) and weight (right): 2008-2011  
(Source: EU Member States DCF data submissions)

The prices obtained for these key species generally increased between 2008 and 2011. In 2011 Atlantic cod achieved the highest average price per kilo by the Polish national fleet (€1.42 per kg), followed by Atlantic herring (€0.36 per kg) and European sprat (€0.20 per kg) (fig. 5.16.4, left). Prices for these species increased significantly i.e. by 23%, 48% and 18% respectively. Significant growth in the European sprat price was caused by unsatisfied demand for this species after cuts in TACs, as well as good demand on external markets. Since most of the European sprat catches are landed for reduction, high fish meal prices also influenced this species price.

### 5.16.3 National fleet economic performance

The total amount of income generated by the Polish national fleet in 2010 was €55 million. This consisted of €40 million in landings values, €0.2 million in non-fishing income, and €14.8 million in direct subsidies (Table 5.16.2). The total income of the Polish national fleet increased 17% between 2008 and 2010 (fig. 5.16.4, right).

Total expenditure by the Polish national fleet in 2010 was €29.8 million, amounting to 54% of total income. The largest expenditure items were crew wages (€11.4 million) and fuel costs (€7.8 million) (Table 5.16.2). Between 2008 and 2010, the total expenditure of the Polish fleet decreased by 12%, fluctuating between €25.5 million and €33.9 million, largely due to changes in fuel prices and salary costs.

Table 5.16.2 Polish national fishing fleet economic performance indicators: 2008-2011.

Forecast figures for 2011 are highlighted in blue and values are also presented as a percentage of total income (grey columns)

	2008	As % of total income	2009	As % of total income	2010	As % of total income	2011	As % of total income	% change (2010-08)
<b>Income (Million €)</b>									
Landings income	34.8	60.7%	37.3	62.0%	40.0	72.7%	46.0	70.9%	15.1%
Direct subsidies	21.8	38.1%	22.9	38.0%	14.8	27.0%	18.9	29.0%	-31.9%
Other income	0.7	1.3%	0.0	0.0%	0.2	0.3%	0.1	0.1%	-78.9%
<i>Total Income</i>	57.3	100%	60.16	100%	55.0	100%	65.0	100%	-4.0%
<b>Expenditure (Million €)</b>									
Crew wages	11.51	20.1%	9.22	15.3%	11.38	20.7%	12.29	18.9%	-1.0%
Unpaid labour	n/a		n/a		n/a		n/a		
Energy costs	10.04	17.5%	6.56	10.9%	7.78	14.1%	8.78	13.5%	-22.5%
Repair costs	3.48	6.1%	2.81	4.7%	3.60	6.5%	3.39	5.2%	3.4%
Variable costs	4.11	7.2%	3.39	5.6%	3.70	6.7%	3.49	5.4%	-10.0%
Non-variable costs	4.75	8.3%	3.48	5.8%	3.33	6.0%	3.25	5.0%	-30.0%
<i>Total operating costs</i>	33.9	59.1%	25.5	42.3%	29.8	54.1%	31.2	48%	-12.1%
Depreciation costs	1.58	2.8%	1.41	2.3%	1.68	3.1%	1.54	2.4%	6.2%
Opportunity costs of capital	1.88	3.3%	2.66	4.4%	2.97	5.4%	2.50	3.9%	57.8%
<b>Performance Indicators (Million €)</b>									
Gross value added (GVA)	13.11	22.9%	21.05	35.0%	21.76	39.6%	27.21	41.9%	66.0%
Gross profit	1.60	2.8%	11.82	19.7%	10.38	18.9%	14.93	23.0%	547.6%
Net profit (incl. subsidies)	19.95	34.8%	30.63	50.9%	20.58	37.4%	32.25	49.6%	3.1%
Net profit (excl. subsidies)	-1.86	-3.2%	7.75	12.9%	5.73	10.4%	13.38	20.6%	408.1%
<b>Capital value (Million €)</b>									
Fleet depreciated replacement value	104.8	183.0%	130.7	217%	99.0	179.9%	114.85	176.7%	-5.6%
Investments	7.5	13.2%	2.0	3%	12.2	22.2%			61.7%
Financial position (%)	8.0		6.0		4.2				-47.5%

(Source: EU Member States DCF data submissions)

In terms of profitability, the total amount of GVA, gross profit and net profit (excluding subsidies) generated by the Polish national fleet in 2010 was €21.8 million, €10.4 million and €5.7 million respectively (Table 5.16.2, fig. 5.16.5). In 2010, the Polish fleet had an estimated depreciated replacement value of €99 million and a rate of return on investment of 6%.



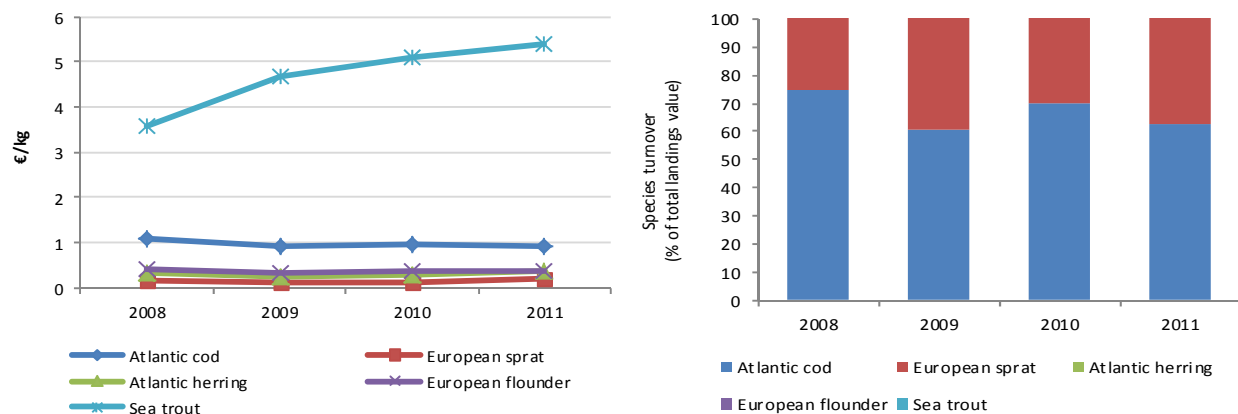


Figure 5.16.4 Total average price (left) and turnover as a percentage of total value of landings (right) for the five key species landed by the Polish national fleet: 2008-2011  
(Source: EU Member States DCF data submissions)

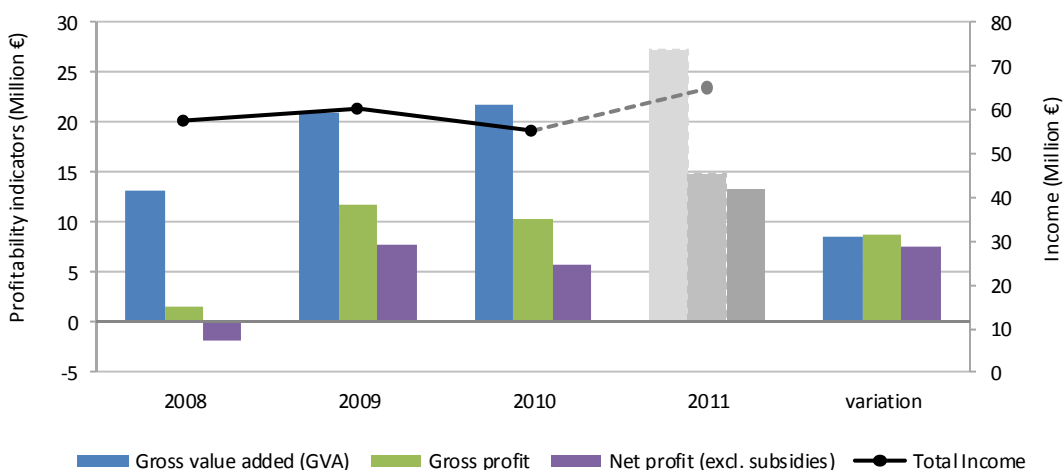


Figure 5.16.5 Polish national fishing fleet economic performance trends: 2008-2011  
(Source: EU Member States DCF data submissions)

#### 5.16.4 Fleet composition

The Polish national fleet consisted of 11 fleet segments in 2010 (9 Baltic Sea segments and 2 Deep Sea). The Polish fleet is highly diversified with a broad range of vessel types targeting different species predominantly in the Baltic Sea (27.3.d). There were 4 inactive length classes consisting of 82 vessels. These vessels are classed as inactive if they did not land any catch in 2010 (or did not report even a single fishing day). If the subsidies are disregarded only one of the active segments made losses in 2010 while 8 made an overall profit.

Table 5.16.3 provides a breakdown of key performance indicators for all Polish fleet segments in 2010. A short description of the five most important segments in terms of total value of landings is provided below.

**Pelagic trawlers 24-40 meters** – 46 vessels make up this segment in 2010. Their capacity was 6.8 thousand GT and engine power 18.3 thousand kW. The segment contributed to 46% of the total tonnage

and 29% of the total power of the Polish Baltic fleet. These vessels target mostly pelagic species such as sprat and herring. The total value of landings was €16.7 million and around 411 FTEs were employed in this fleet segment in 2010, contributing to 42% and 33% of the total income from landings and FTEs generated by the Polish fishing fleet operating on the Baltic, respectively. This fleet segment was highly profitable, with reported profits of around €1.8 million, or €8.0 million if subsidies are included, in 2010 (fig. 5.16.5).

Table 5.16.3 Polish national fishing fleet composition and key indicators at fleet segment level for 2010

Fleet Segment	Number of vessels	Vessel tonnage (GT)	Vessel power (kW)	Total employed	FTE (national)	Days at sea	Energy consumption (kilolitres)	Landings weight (tonnes)	Landings value (thousand €)	Direct Subsidies (thousand €)	GVA (thousand €)	Gross profit (thousand €)	Net profit (excl. subsidies) (thousand €)	Net Profit (incl. subsidies) (thousand €)	Cluster
<b>DFN</b>	<b>22</b>	<b>675</b>	<b>2852</b>	<b>114</b>	<b>116</b>	<b>2819</b>	<b>394</b>	<b>2109</b>	<b>2439</b>	<b>339</b>	<b>1585</b>	<b>713</b>	<b>528</b>	<b>866</b>	
VL1218	22	675	2852	114	116	2819	394	2109	2439	339	1585	713	528	866	Cluster1
<b>DTS</b>	<b>90</b>	<b>5648</b>	<b>21179</b>	<b>371</b>	<b>246</b>	<b>8598</b>	<b>2965</b>	<b>21777</b>	<b>9677</b>	<b>3147</b>	<b>5501</b>	<b>3591</b>	<b>2555</b>	<b>5702</b>	
VL1012	12	157	1228	47	19	822	172	621	643	290	287	154	109	399	
VL1218	47	1473	7911	192	141	4708	1642	7217	5052	1628	2804	1777	1244	2872	Cluster2A
VL1824	20	1171	5442	83	57	2113	775	5437	2506	896	1459	939	674	1570	
VL2440	10	1043	3224	50	29	647	375	3192	1477	334	951	721	528	862	
VL40XX	1	1805	3375			308		5309		0					
<b>HOK</b>	<b>37</b>	<b>1195</b>	<b>4996</b>	<b>177</b>	<b>75</b>	<b>2024</b>	<b>406</b>	<b>624</b>	<b>1475</b>	<b>1914</b>	<b>630</b>	<b>-273</b>	<b>-581</b>	<b>1333</b>	
VL1218	37	1195	4996	177	75	2024	406	624	1475	1914	630	-273	-581	1333	Cluster4A
<b>PG</b>	<b>526</b>	<b>2328</b>	<b>19979</b>	<b>1121</b>	<b>419</b>	<b>40837</b>	<b>1423</b>	<b>10951</b>	<b>9675</b>	<b>6211</b>	<b>6257</b>	<b>2905</b>	<b>1819</b>	<b>8030</b>	
VL0010	472	1708	16072	927	320	35792	1065	8284	7304	4822	4771	2052	1278	6101	
VL1012	54	620	3907	194	99	5045	358	2667	2371	1389	1486	853	541	1930	
<b>TM</b>	<b>49</b>	<b>26269</b>	<b>33323</b>	<b>340</b>	<b>411</b>	<b>7824</b>	<b>7249</b>	<b>135312</b>	<b>16691</b>	<b>3234</b>	<b>7790</b>	<b>3441</b>	<b>1833</b>	<b>5067</b>	
VL2440	46	6798	18283	340	411	6923	7249	79950	16691	3234	7790	3441	1833	5067	Cluster3
VL40XX	3	19471	15040			901		55362		0					
<b>Cluster Name</b>		<b>Clustered fleet segments</b>													
CLUSTER1		DFN VL1218 DFN VL1824													
CLUSTER2A		DTS VL1218 TM VL1218													
CLUSTER3		TM VL1824 TM VL2440													
CLUSTER4A		HOK VL1012 HOK VL1218 HOK VL1824 HOK VL2440													

(Source: EU Member States DCF data submissions)

**Passive gear 0-10 meters** – Around 472 vessels make up this segment which operates exclusively in coastal area of the Baltic Sea as well as in brackish waters of lagoons. Average vessel in the segment was 7.6 meter overall length and has 34 kW engine. The fleet targets a variety of species, such as cod, herring, European perch, pike perch and various freshwater species. The total value of landings was €8.3 million and around 320 FTEs (930 total jobs) were employed in this fleet segment in 2010, contributing to 18% and 25% of the total income from landings and FTEs generated by the Polish fishing fleet, respectively. This fleet segment made a large profit of around €1.3 million, or €6.1 million if subsidies are included, in 2010.

**Demersal trawlers 12-18 meters** – 47 vessels make up this segment in 2010. This segment is based exclusively on the Baltic Sea. The vessels target demersal species such as cod and flounder. The total value of landings was €5.0 million and around 141 FTEs were employed in this fleet segment in 2010, contributing to 12.6% and 11.1% of the total income from landings and FTEs generated by the Polish fishing fleet, respectively. This fleet segment was highly profitable, with reported profits of around €1.2 million, or €2.8 if subsidies are included, in 2010.

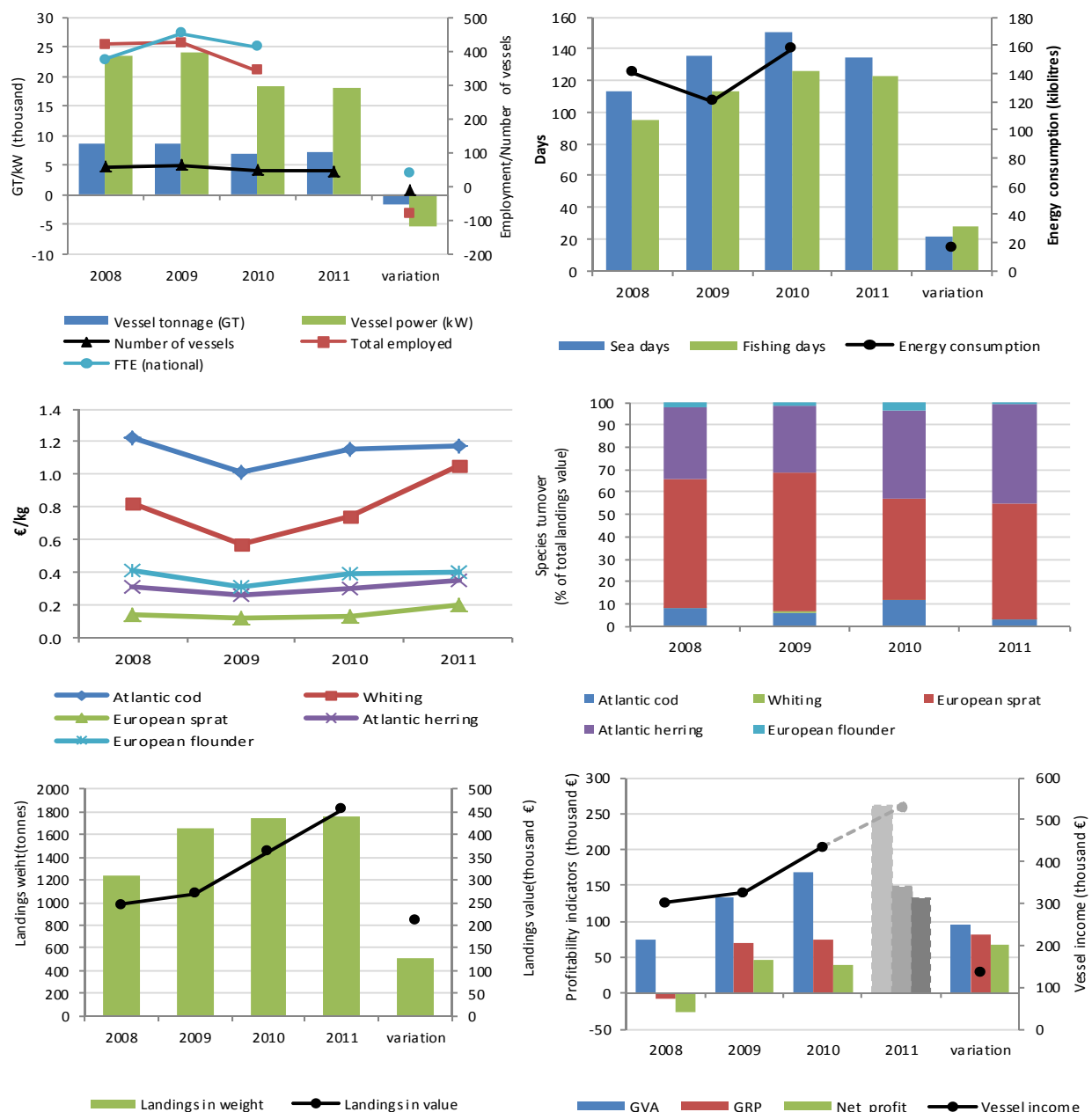


Figure 5.16.6 Key indicators for the average vessel in the Polish DTS VL1824 fleet segment, 2008-2011: top left – fleet capacity and employment; top right – fishing activity and effort; middle left – average prices (€/kg) for key species; middle right - turnover as a percentage of total value of landings for key species; bottom left - landings in value and weight; bottom right –main economic indicators for the average vessel (variation 2010-2008). (Million €). (Source: EU Member States DCF data submissions)

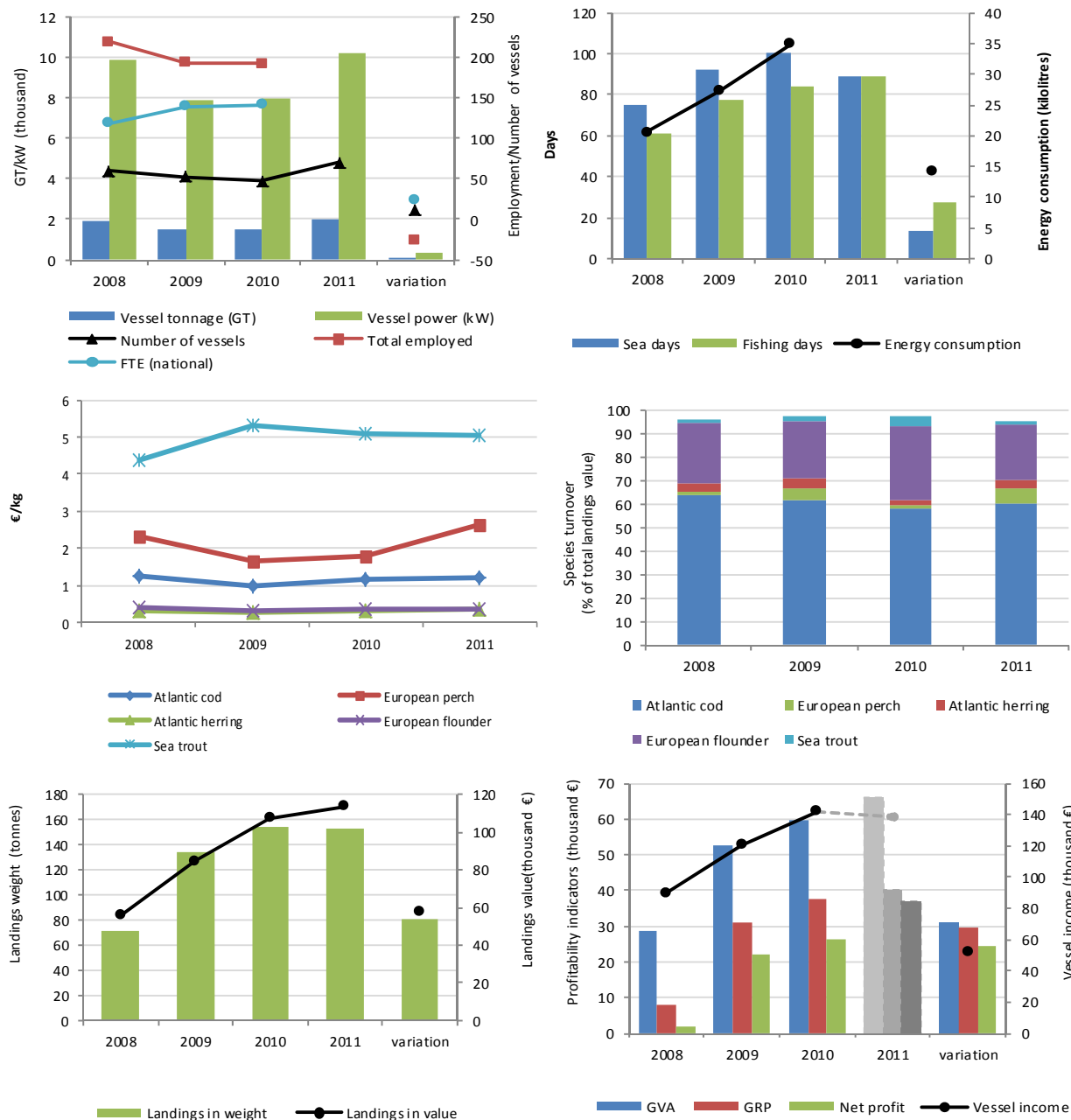


Figure 5.16.7 Key indicators for the average vessel in the Polish PMP VL0612 fleet segment 2008-2011: top left – fleet capacity and employment; top right – fishing activity and effort; middle left – average prices (€/kg) for key species; middle right - turnover as a percentage of total value of landings for key species; bottom left - total landings in value and weight; bottom right –main economic indicators for the average vessel (variation 2010-2008)

(Source: EU Member States DCF data submissions)

### 5.16.5 Assessment for 2011 and 2012

In 2010 Polish fisheries was highly profitable (€6.1 million or €20.9 million with subsidies). According to provisional 2011 data, good economic performance of the Polish fleet can be expected again. This will

be a result of increased value of fish landed, what was a consequence of higher cod TAC and generally higher fish prices. In 2011 cod, sprat and herring prices increased 23%, 48% and 18% respectively. Total landings value for 2011 was 21% higher than in 2010. On the other hand, total effort deployed (days at sea) decreased by 5%. The increase in landings value was especially significant in PG 1012 (83%) and DTS VL1218 (74%), since value of landed fish decreased for HOK VL1218 (-54%). This can be partly explained by lower number of vessels belonging to this segment in 2011 (27 compared to 37 in 2010). The most important fleet segment in terms of turnover (TM VL2440) increased its landings value by 30%, with very little increase in days at sea (3%). This increase can be explained by higher pelagic fish prices (volume of landings dropped by 3%).

The economic situation of the Polish fishing fleet may deteriorate in 2012. This will be a result of an increased number of vessels that will return to fisheries after termination of the 3 years cod quota allocation system implemented in 2009 (rotating suspension of 1/3 of the cod fleet each year). Lower TACs for pelagic species (sprat and herring) maybe partly compensated by higher prices. Increasing foreign landings of Baltic cod in Poland and higher TAC for this species may mean that cod supplies will exceed market demand. This imbalance may result in price drops and consequently the deterioration in the economic situation for demersal segments.

No significant changes in fleet capacity and composition took place in 2011, the total number of vessels was slightly lower (2%) than in 2010 also effort (sea days) declined slightly – by 5%.

#### **5.16.6 Data issues**

Due to confidentiality reasons deep-sea vessels (vessels over 40m) were excluded from economic analysis. However transversal data (except for value of landings) were provided for all fleet segments. Data are generally consistent with Eurostat statistics, except for volume of landings. This is because Eurostat data exclude deep sea landings.



## 5.17 PORTUGAL

### 5.17.1 National fleet structure

In 2012 the Portuguese fishing fleet consisted of 8412 registered vessels (total of 4523 licensed, represents 3777 vessels from mainland, 645 from Autonomous Region of Azores and 101 from Autonomous Region of Madeira), with a combined gross tonnage of 101,3 thousand GT and total power of 359,3 thousand kW and an average age of 29 years (Table 5.17.1). The size of the Portuguese fishing fleet has followed a decreasing trend between 2008 and 2012. The number of vessels declined by 3% (or 229 vessels) while the total GT and kW of the fleet declined by 3% and 6%, respectively during the same period (fig. 5.17 1).

Table 5.17.1 Portuguese national fishing fleet key indicators: 2008-2012

	2008	2009	2010	2011	2012	% change
<b>Capacity</b>						
Number of vessels	8706	8641	8606	8502	8412	-3.4
Average vessel age	27	27	28	29	29	7.4
Gross Tonnage (GT, thousand)	104.8	104.8	103.3	102.2	101.3	-3.3
Power (kW, thousand)	381.6	383.5	377.6	374.8	359.3	-5.8
<b>Effort</b>						
Days at sea (thousand)	411.0	392.2	383.7	297.2		-27.7
Fishing days (thousand)	398.8	381.8	372.9	291.8		-26.8
Energy consumption (Million litres)	120.2	122.8	127.8			6.3
<b>Employment</b>						
Total Employed	17170	17514	17323			0.9
FTE	17170	15633	17080			-0.5
<b>Landings</b>						
Weight (thousand tonnes)	186.1	161.9	189.3	188.1		1.1
Value (Million €)	369.1	309.1	347.3	361.0		-2.2

(Source: EU Member States DCF data submissions)

The total number of fishing enterprises in the licensed Portuguese fleet was 4682 in 2011. The vast majority of fishing enterprises, 89,4%, owned a single vessel and 10,5% of enterprises owned two to five fishing vessels. Only 4 fishing enterprises owned six or more fishing vessels.

Total employment was around 17323 jobs and 17080 FTEs in the Portuguese fleet in 2010. The level of employment change between 2008 and 2010, with the total number employed increasing by 1% and the number of FTEs decreasing by 1% over the time period (Table 5.17.1; fig. 5.17.1).

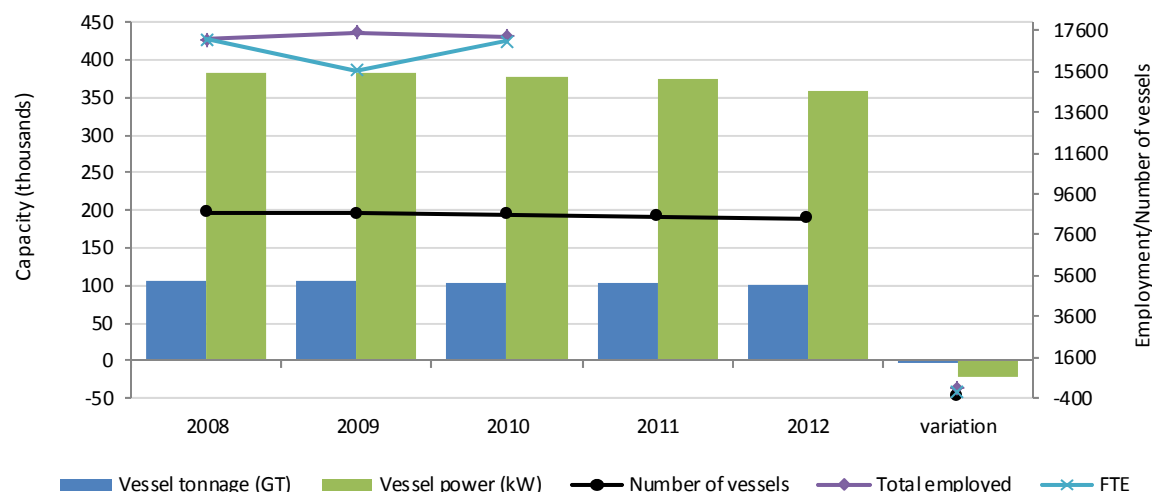


Figure 5.17.1 Portuguese national fleet capacity and employment trends: 2008-2012  
(Source: EU Member States DCF data submissions)

### 5.17.2 National fleet fishing activity and output

In 2011 the Portuguese fishing fleet spent a total of around 297 thousand days at sea (Table 5.17.1), 98% of which were actual fishing days. The total number of days at sea declined by around 28% between 2008 and 2011, while total fishing days decreased during the same period (fig. 5.17.2, left). The total quantity of fuel consumed in 2010 was 128 million litres, a increase of around 6% between 2008 and 2010 (fig. 5.17.2, left).

The total volume of landings achieved by the Portuguese fleet in 2011 was 188,1 thousand tonnes of seafood. The total volume of landings has decreased in 2009 but increased between 2009 and 2011 (fig. 5.17.2, right).

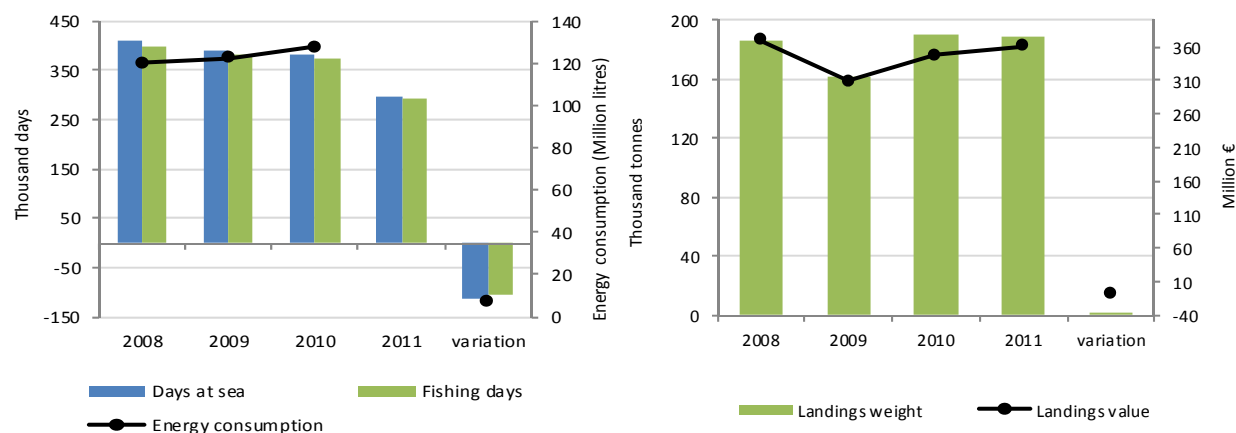


Figure 5.17.2 Portuguese national fleet fishing effort (left) and landings trends (right): 2008-2011  
(Source: EU Member States DCF data submissions)

In 2011 European pilchard (sardine) accounted for the highest value of landings (€41.1 million) by the national fleet, followed by Atlantic cod (€31.8 million), Common octopus (€28 million), Atlantic



redfishes nei (€22.6 million) and then Blue shark Atlantic (€18.8 million) (fig. 5.17.3, top). In terms of landings composition, in 2011, European pilchard (sardine) was the most common species landed in terms of volume (53.8 thousand tonnes), followed by Scomber mackerels nei (29.5 thousand tonnes), Blue shark Atlantic (11.3 thousand tonnes), Atlantic horse mackerel (9.6 thousand tonnes) and Atlantic redfishes nei (9.2 thousand tonnes) (fig. 5.17.3, bottom).

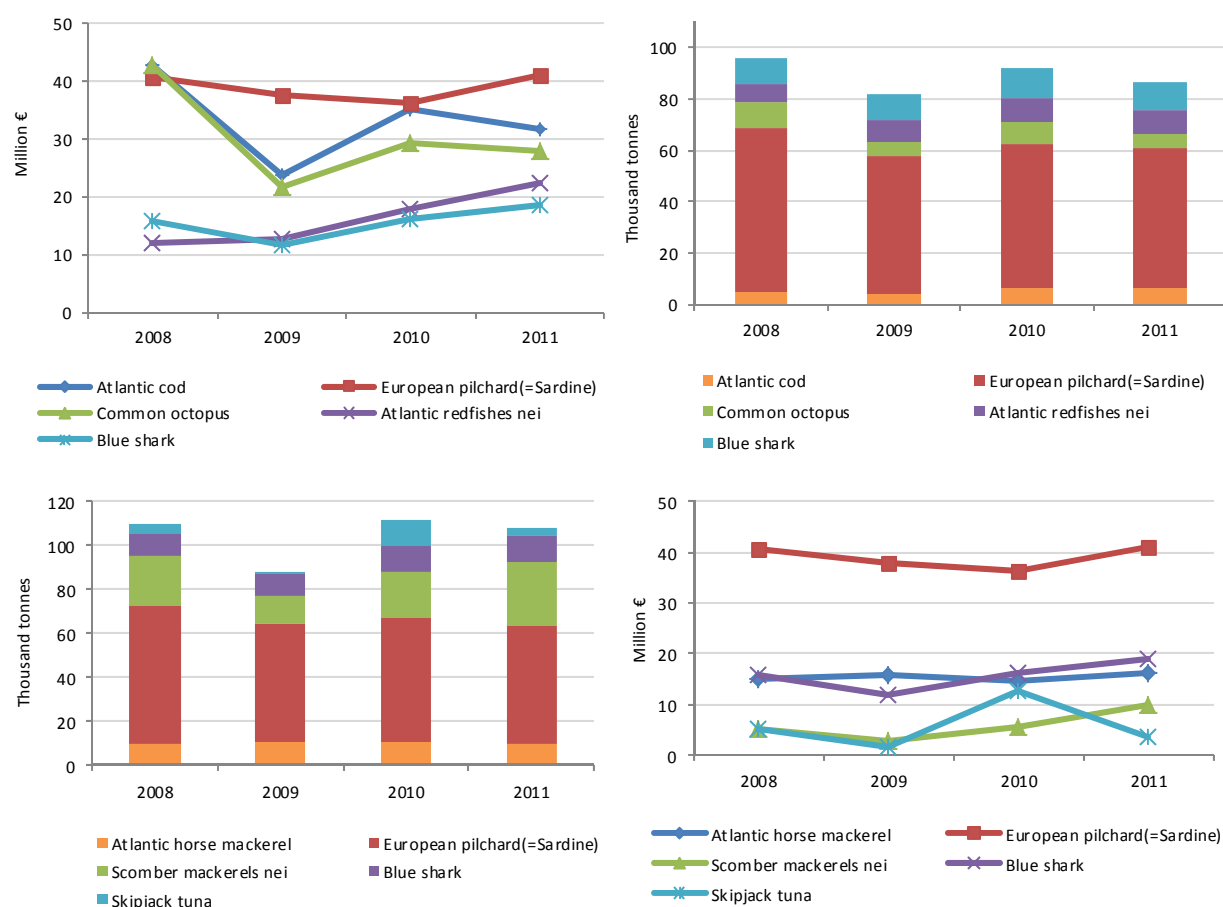


Figure 5.17.3 Portuguese national fleet total landings by key species in terms of value (top) and weight (bottom), with corresponding weights and values: 2008-2011  
(Source: EU Member States DCF data submissions)

In terms of prices, in 2011 Common octopus (€5.03 per kg) achieved the highest average price per kilo followed by Atlantic cod (€4.74 per kg) (fig. 5.17.4, left). The species with lower price is European pilchard (sardine) (€0.76 per kg). The prices obtained for the species Atlantic cod declined between 2008 and 2011, Common octopus increased between 2008 and 2011. The price of species, Atlantic redfishes nei, Blue shark Atlantic and European pilchard (sardine) stay stable between 2008 and 2011.

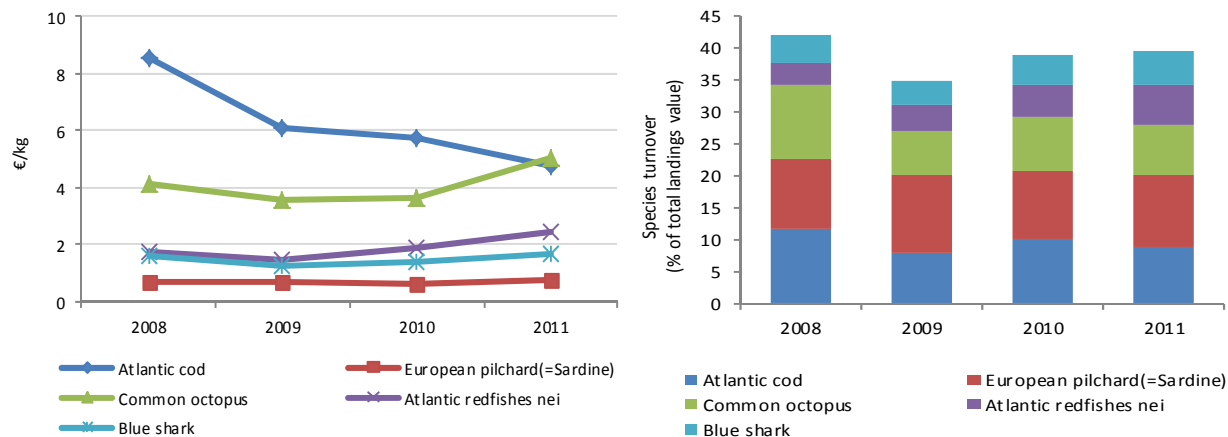


Figure 5.17.4 Total average price (left) and turnover as a percentage of total value of landings (right) for the five key species landed by the Portuguese national fleet: 2008-2011  
(Source: EU Member States DCF data submissions)

### 5.17.3 National fleet economic performance

The total amount of income generated by the Portuguese national fleet in 2010 was €400.7 million. This consisted of €377.3 million in landings values, €21.4 million in other income, and €2 million in direct subsidies (Table 5.17.2). The total income of the Portuguese fleet decreased 3% between 2008 and 2010 (fig. 5.17.4, right).

Total expenditure by the Portuguese national fleet in 2010 was €370.2 million, amounting to 92% of total income. The largest expenditure items were crew wages (€144.7 million) and fuel costs (€70.2 million) (Table 5.17.2). Between 2008 and 2010, the total expenditure of the Portuguese fleet decreased by 0.6%, fluctuating between €372.5 million and €370.2million, largely due to the decrease of the fuel and wages and salaries of crew.

In terms of profitability, the total amount of GVA, gross profit and net profit (excluding subsidies) generated by the Portuguese national fleet in 2010 was €240.9 million, €96,1 million and €13.2 million respectively (Table 5.17.2, fig. 5.17.5). In 2010, the Portuguese fleet had an estimated capital value of €329.4 million and a rate of return on investment of 4%. In 2010, break-even revenue was estimated at €358.3 million.

Table 5.17.2 Portuguese national fishing fleet economic performance indicators: 2008-2011.

Forecast figures for 2011 are highlighted in blue and values are also presented as a percentage of total income (shaded grey columns)

	2008	As % of total income	2009	As % of total income	2010	As % of total income	2011	As % of total income	% change (2010-08)
<b>Income (Million €)</b>									
Landings income	414.7	100.0%	361.51	99.2%	377.3	94.2%	361.02	96.5%	-9.0%
Direct subsidies	0	0%	2.85	0.8%	2.0	0.5%	2.45	0.7%	
Other income	0	0%	0	0%	21.4	5.3%	10.68	2.9%	
Fishing rights income	0	0%	0	0%	0	0%	0	0.0%	
<b>Total Income</b>	<b>414.7</b>	<b>100%</b>	<b>364.36</b>	<b>100%</b>	<b>400.7</b>	<b>100%</b>	<b>374.1</b>	<b>100%</b>	<b>-3.4%</b>
<b>Expenditure (Million €)</b>									
Crew wages	155.4	37.5%	123.9	34.0%	139.4	34.8%	144.8	38.7%	-10.3%
Unpaid labour	0.0	0.0%	0.0	0.0%	5.3	1.3%	2.9	0.8%	
Energy costs	72.7	17.5%	57.9	15.9%	70.2	17.5%	65.1	17.4%	-3.4%
Repair costs	24.1	5.8%	22.7	6.2%	16.7	4.2%	12.9	3.5%	-30.8%
Variable costs	35.8	8.6%	37.4	10.3%	44.9	11.2%	34.8	9.3%	25.2%
Non-variable costs	25.6	6.2%	20.2	5.5%	26.0	6.5%	25.6	6.9%	1.5%
Rights costs	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	
<b>Total operating costs</b>	<b>313.6</b>	<b>75.6%</b>	<b>262.1</b>	<b>71.9%</b>	<b>302.5</b>	<b>75.5%</b>	<b>286.2</b>	<b>76.5%</b>	<b>-3.5%</b>
Depreciation costs	58.9	14.2%	64.4	17.7%	67.7	16.9%	66.1	17.7%	15.1%
Opportunity costs of capital	6.3	1.5%	19.5	5.4%	15.2	3.8%	13.7	3.7%	140.4%
<b>Performance Indicators (Million €)</b>									
Gross value added (GVA)	256.4	61.8%	223.4	61.3%	240.9	60.1%	233.3	62.3%	-6.1%
Gross profit	101.1	24.4%	99.4	27.3%	96.1	24.0%	85.5	22.8%	-4.9%
Net profit (incl. subsidies)	35.9	8.7%	18.4	5.0%	15.3	3.8%	21.9	5.8%	-57.5%
Net profit (excl. subsidies)	35.9	8.7%	15.5	4.3%	13.2	3.3%	19.4	5.2%	-63.2%
<b>Capital value (Million €)</b>									
Depreciation (replacement) costs	356.2	0.9	378.1	1.0	384.6	1.0	381.4	1.0	8.0%
Investments	20.8	0.1	20.3	0.1	15.8	0.0			

source: EU Member States DCF data submissions)

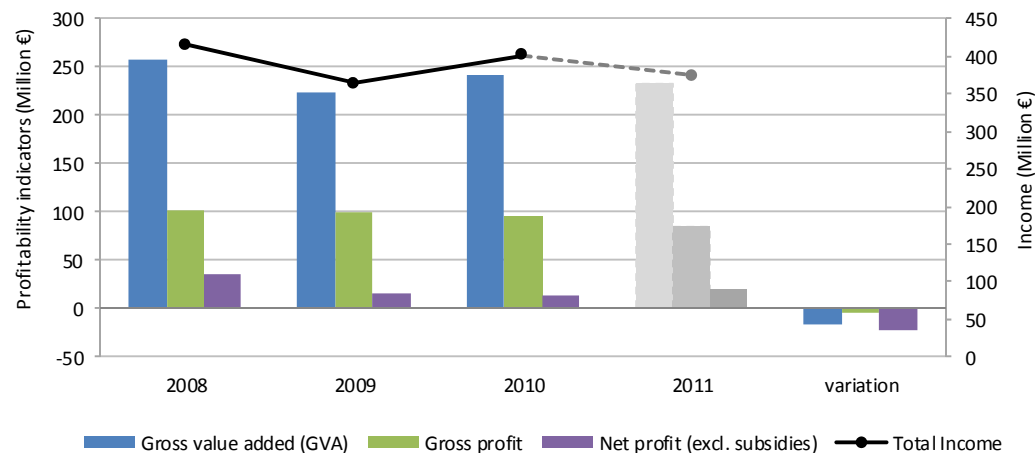


Figure 5.17.5 Portuguese national fishing fleet economic performance trends: 2008-2011

(Source: EU Member States DCF data submissions)

#### 5.17.4 Fleet composition

The Portuguese national fleet (mainland and Autonomous regions of Azores and Madeira) consisted of 45 fleet segments in 2010. The Portuguese fleet is highly diversified with a broad range of vessel types (9 types of gears with different vessel length) targeting different species predominantly in the Portuguese Exclusive Economic Zone. There were 6 inactive length classes consisting of 3622 vessels. These vessels are classed as inactive if they did not land any catch or annual permit to operate in 2010. 15 of the active segments made losses in 2010 while 30 made an overall profit.

The Azorean fishing fleets are all include in the polyvalent passive and active gear segments (PMP). These fleets operate predominantly in Area 27 (ICES sub-area X).

The Madeiran fishing fleets include the gears: Hooks, Polyvalent active gears only and Polyvalent passive and active gear . These segments fish mostly around the islands of Madeira, Porto Santo, “Desertas e selvagens” and seamounts inside the Madeiran Economic Exclusive Zone (CECAF 34.1.2.).

Table 5.17.3 provides a breakdown of key performance indicators for all Portuguese fleet segments in 2010. A short description of the five most important segments in terms of total value of landings is provided below.

**Demersal trawl and seine 24-40m** – 67 vessels make up this segment and are based predominantly in Portuguese Economic exclusive Zone or Spanish exclusive Zone. These fleet segment are is divided into vessels target demersal species and crustaceans such as European Hake, Atlantic horse mackerel , Atlantic mackerel, Blue whiting , Norway lobster and Deep-rose shrimps. The total value of income landings was €48.2 million and around 595 FTEs were employed in this fleet segment in 2010, contributing to 8% and 3% of the total income from landings and FTEs generated by the Portuguese fishing fleet, respectively. This fleet segment was profitable, with reported profits of around € 1.45 million in 2010 (fig. 5.17.6). This segment is the most important segment in landing value.

**Demersal trawl and seine over 40m**– Around 13 vessels make up this segment and operate predominantly in Nafo, Irminger sea, Norway and Svalbard. The fleet targets a variety of species, such as Cod and Atlantic red fish. The total value of income landings was €47 million and around 418 FTEs were employed in this fleet segment in 2010, contributing to 12% and 2% of the total income from landings and FTEs generated by the Portuguese fishing fleet, respectively. This fleet segment made the highly profit , with reported profits of around € 6 million in 2010.

**Hooks 24-40m** – 36 vessels make up this segment and are based predominantly in the Atlantic ocean. These vessels is divided into two fleet complements, the drifting pelagic long lines fishery target migratory species such as swordfish, blue sharks and tuna, and the deep water long lines fishery target Black scabbard fishery. The total value of income landings was €32.2 million and around 385 FTEs were employed in this fleet segment in 2010, contributing to 9% and 2% of the total income from landings and FTEs generated by the Portuguese fishing fleet, respectively. This fleet segment was profitable, with reported profits of around €0.7 million in 2010.

**Polyvalent passive gears 0-10m** – Around 1629 vessels make up this segment and operate predominantly in Portuguese Economic exclusive Zone. These vessels use several different gears in the same trip and by season, depending of the species availability target mainly European hake, European conger, Common octopus and European cuttlefish. The total value of income landings was €31.3million and around 3564 FTEs were employed in this fleet segment in 2010, contributing to 8% and 21% of the total income from landings and FTEs generated by the Portuguese fishing fleet, respectively. This fleet segment made the largest profit, with reported profits of around €7.5 million in 2010.

Table 5.17.1 Portuguese national fishing fleet composition and key indicators at fleet segment level for 2010

Fleet Segment	Number of vessels	Vessel tonnage (GT)	Vessel power (kW)	Total employed	FTE (national)	Days at sea	Energy consumption (kilolitres)	Landings weight (tonnes)	Landings value (thousand €)	Direct Subsidies (thousand €)	GVA (thousand €)	Gross profit (thousand €)	Net profit (excl. subsidies) (thousand €)	Net Profit (incl. subsidies) (thousand €)
<b>DFN</b>	<b>683</b>	<b>4511</b>	<b>27115</b>	<b>2362</b>	<b>2311.6</b>	<b>38487</b>	<b>7014</b>	<b>6001</b>	<b>20761</b>	<b>202</b>	<b>19995</b>	<b>7664</b>	<b>2104</b>	<b>2306</b>
VL0010	551	711	9150	1320	1270	17236	1251	704	2797	0	5272	1986	638	638
VL1012	23	216	1543	95	95	2906	472	372	1667	12	1317	664	263	275
VL1218	85	1903	10716	661	661	13816	3262	3376	11576	102	8993	3209	1062	1164
VL1824	24	1681	5706	286	286	4529	2028	1549	4721	88	4413	1805	140	228
<b>DRB</b>	<b>75</b>	<b>569</b>	<b>4895</b>	<b>265</b>	<b>263</b>	<b>6530</b>	<b>1581</b>	<b>1039</b>	<b>1862</b>	<b>35</b>	<b>1432</b>	<b>-363</b>	<b>-1350</b>	<b>-1315</b>
VL0010	33	111	1557	82	81	2948	411	211	475	4	305	-24	-243	-240
VL1012	25	208	1786	93	93	2239	642	427	650	10	418	-183	-549	-539
VL1218	17	250	1552	90	90	1343	528	402	736	22	709	-156	-558	-535
<b>DTS</b>	<b>179</b>	<b>40959</b>	<b>69957</b>	<b>1366</b>	<b>1361</b>	<b>27298</b>	<b>53445</b>	<b>40388</b>	<b>112964</b>	<b>477</b>	<b>61691</b>	<b>27885</b>	<b>7362</b>	<b>7839</b>
VL0010	76	197	2617	201	195	7412	696	367	1377	0	1387	236	-162	-162
VL1012	6	52	257	26	26	615	65	48	221	3	253	151	71	74
VL1218	9	298	1508	55	55	1562	833	706	2085	9	1166	192	-40	-31
VL1824	8	924	2644	71	71	1949	2143	868	4780	59	3197	1351	423	482
VL2440	67	14399	35214	596	596	12944	27771	17226	42913	405	24007	10164	1043	1449
VL40XX	13	25089	27717	418	418	2816	21937	21172	61588	0	31680	15792	6026	6026
<b>FPO</b>	<b>440</b>	<b>2898</b>	<b>22653</b>	<b>1374.03</b>	<b>1362.3</b>	<b>39797</b>	<b>5351</b>	<b>5565</b>	<b>20137</b>	<b>188</b>	<b>17594</b>	<b>7138</b>	<b>2796</b>	<b>2984</b>
VL0010	328	731	10497	687	675	24406	1686	1643	6337	13	5460	1155	-218	-204
VL1012	50	441	3619	190	190	6117	1041	954	3482	19	3052	1784	956	975
VL1218	54	1178	6595	394	394	7760	2116	2311	8259	108	7069	3195	1708	1815
VL1824	8	548	1942	103.08	103.08	1514	507	657	2059	48	2013	1003	350	397
<b>HOK</b>	<b>435</b>	<b>16396</b>	<b>45669.66</b>	<b>2024.43</b>	<b>2021.7</b>	<b>40076</b>	<b>26091.2</b>	<b>25738.18</b>	<b>71232</b>	<b>623</b>	<b>40558</b>	<b>18721</b>	<b>-3365</b>	<b>-2742</b>
VL0010	301	415	6827	690	688	14710	1714	702	2502	0	3250	916	286	286
VL1012	15	128	1257	92	92	2271	356	453	1600	4	1097	141	-125	-121
VL1218	43	1236	6671	455	455	6111	2517	3576	10516	57	8658	3674	2097	2154
VL1824	35	2861	8853	346	346	5841	4014	4816	15056	156	11846	5225	2591	2747
VL2440	36	8846	17893	385	385	9636	14425	12877	31380	346	12689	6436	682	1028
VL40XX	5	2910	4169	56	56	1507	3064	3314	10177	60	3018	2330	-8895	-8836

(Source: EU Member States DCF data submissions)

Fleet Segment	Fleet Segment	Number of vessels	Vessel tonnage (GT)	Vessel power (kW)	Total employed	FTE (national)	Energy consumption (kilolitres)	Landings weight (tonnes)	Landings value (thousand €)	Direct Subsidies (thousand €)	GVA (thousand €)	Gross profit (thousand €)	Net profit (excl. subsidies) (thousand €)	Net Profit (incl. subsidies) (thousand €)
<b>MGP</b>	<b>21</b>	<b>178</b>	<b>413</b>	<b>89</b>	<b>87</b>	<b>1408</b>	<b>205</b>	<b>627</b>	<b>864</b>	<b>0</b>	<b>618</b>	<b>107</b>	<b>-41</b>	<b>-41</b>
VL0010	17	18	222	45	44	765	34	76	301	0	299	69	44	44
VL1824	4	160	191	44	44	643	171	550	562	0	319	38	-85	-85
<b>PGP</b>	<b>1682</b>	<b>4253</b>	<b>53145</b>	<b>3837</b>	<b>3756</b>	<b>104967</b>	<b>6977</b>	<b>6361</b>	<b>25449</b>	<b>83</b>	<b>25873</b>	<b>14654</b>	<b>7234</b>	<b>7317</b>
VL0010	1629	2946	47070	3564	3483	100319	5475	5393	21950	43	22124	13178	7496	7539
VL1012	23	198	1624	85	85	1909	434	201	827	3	759	132	-161	-158
VL1218	26	504	3017	153	153	2669	884	735	2559	31	2484	1054	227	258
VL1824	4	605	1434	36	36	70	184	32	114	5	505	290	-327	-322
<b>PMP</b>	<b>1263</b>	<b>8023</b>	<b>54149</b>	<b>3490</b>	<b>3474</b>	<b>103622</b>	<b>16514</b>	<b>21675</b>	<b>45023</b>	<b>14</b>	<b>32333</b>	<b>10033</b>	<b>-6771</b>	<b>-6757</b>
VL0010	1095	1944	27893	2224	2190	80438	5336	6686	16088	1	12617	4570	-5516	-5515
VL1012	86	800	7883	564	564	11194	2203	2606	6988	2	4508	-1405	-2836	-2833
VL1218	56	1179	6969	440	458	8614	2265	3323	7358	10	5708	731	-561	-551
VL2440	26	4100	11404	262	262	3376	6710	9060	14588	0	9500	6138	2142	2142
<b>PS</b>	<b>200</b>	<b>6044</b>	<b>31772</b>	<b>2515</b>	<b>2442</b>	<b>21405</b>	<b>10597</b>	<b>81895</b>	<b>49169</b>	<b>423</b>	<b>40770</b>	<b>10281</b>	<b>7430</b>	<b>7853</b>
VL0010	54	180	2067	406	367	3566	426	2464	2269	3	1936	421	65	69
VL1012	35	293	2409	311	296	3886	636	4642	4287	21	3544	1399	885	906
VL1218	36	730	4757	418	399	3980	1168	9297	6508	57	4907	-96	-460	-403
VL1824	54	3030	15311	977	976	7134	5130	43067	22821	249	18647	4561	3485	3734
VL2440	21	1811	7228	405	405	2839	3237	22426	13284	92	11735	3997	3454	3546

Table 5.17.3 Portuguese national fishing fleet composition and key indicators at fleet segment level for 2010 cont.  
(Source: EU Member States DCF data submissions)

**Purse seine 18-24m** – 54 vessels make up this segment and operate predominantly in ICES division IXa. These vessels target a variety of pelagic species, such as European Pilchard (Sardine), Scomber mackerels nei, Atlantic horse mackerel, European anchovy and Blue jack mackerel. The total value of income landings was €24 million and around 977 FTEs were employed in this fleet segment in 2010, contributing to 6% and 6% of the total income from landings and FTEs generated by the Portuguese fishing fleet, respectively. This fleet segment made a profit, with reported profits of around €3.7 million in 2010. This segment is a very important fleet segment for the Portugal National fleet because have the largest landing volume (fig. 5.17.7).

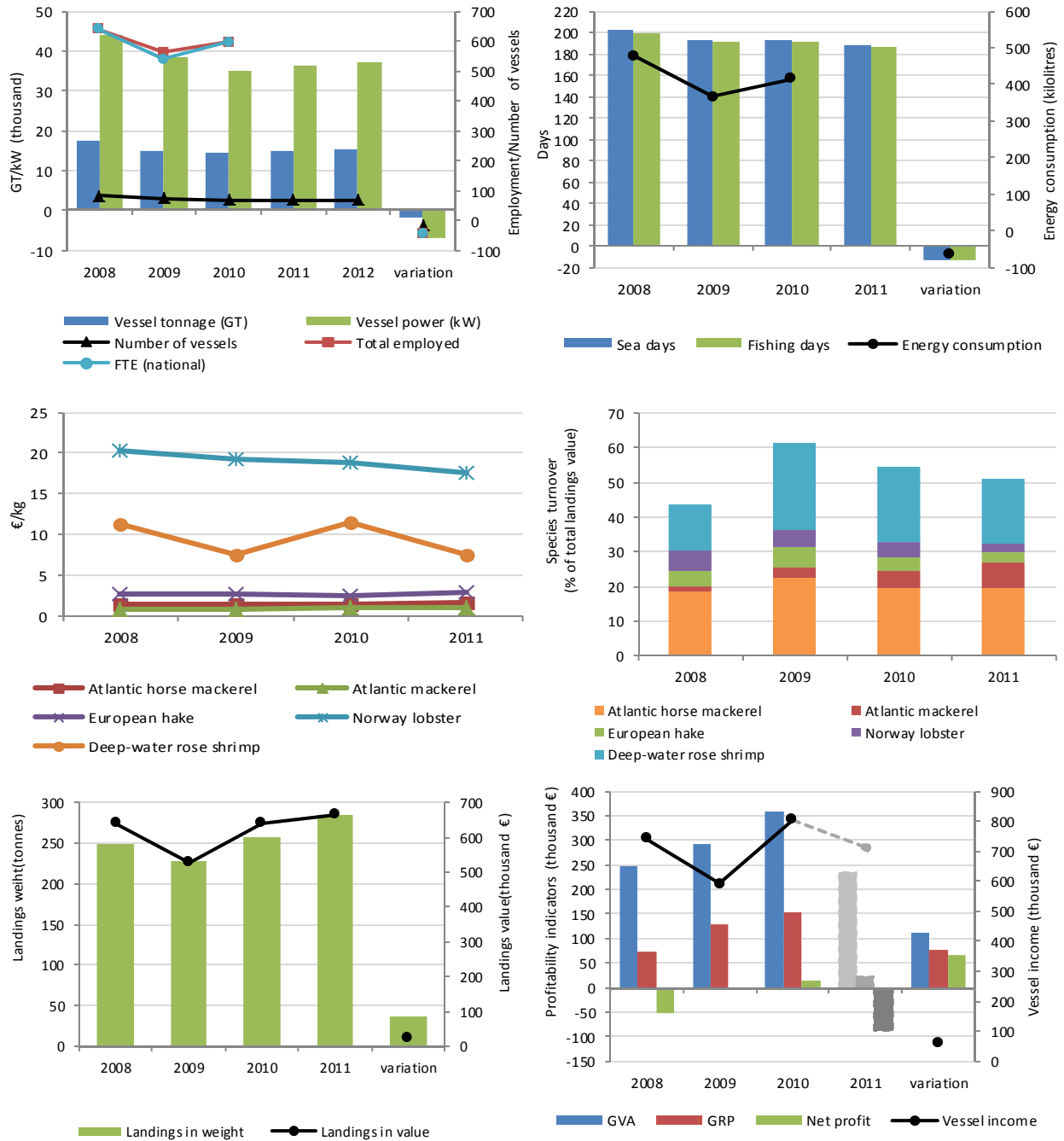


Figure 5.17.6 Key indicators for the average vessel in the Portuguese DTS VL2440 fleet segment, 2008-2011:

top left – fleet capacity and employment; top right – fishing activity and effort; middle left – average prices (€/kg) for key species; middle right - turnover as a percentage of total value of landings for key species; bottom left - landings in value and weight; bottom right – main economic indicators for the average vessel (variation 2010-2008)

(Source: EU Member States DCF data submissions)

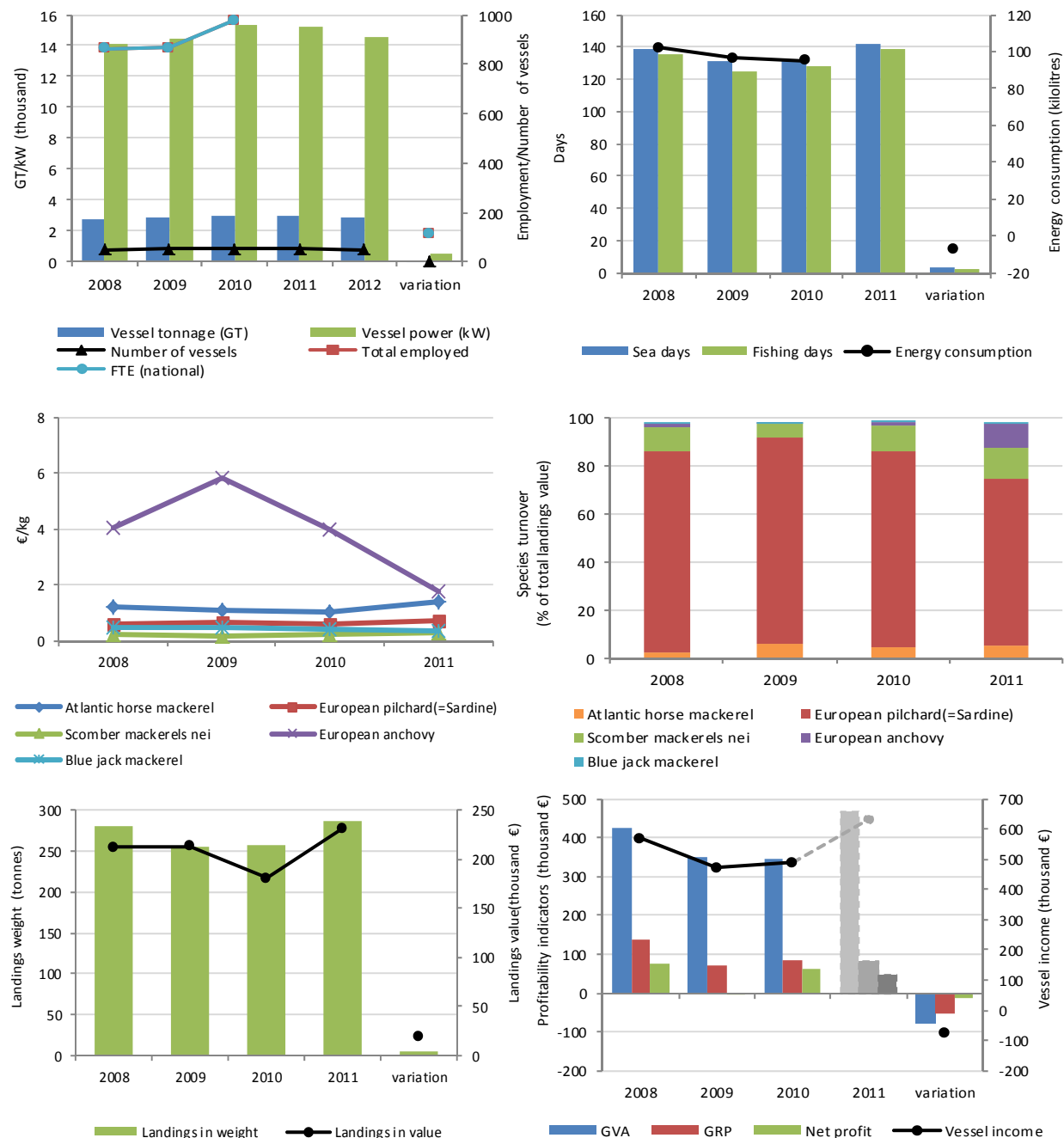


Figure 5.17.7 Key indicators for the average vessel in the Portuguese PS VL1824 fleet segment 2008-2011: top left – fleet capacity and employment; top right – fishing activity and effort; middle left – average prices (€/kg) for key species; middle right - turnover as a percentage of total value of landings for key species; bottom left - total landings in value and weight; bottom right –main economic indicators for the average vessel (variation 2010-2008)

(Source: EU Member States DCF data submissions)



#### **5.17.5 Assessment for 2011 and 2012**

In 2011 and 2012 there were no significant changes in structure of the fleet. There is an overall trend of decreasing vessel numbers and capacity, both in tonnage (GT) and power (KW). There also was a slight decrease in the number of licensed vessels, as result of no permission/license for operating in these years or for the withdrawal of some vessels, measures implemented as part of the plan to adjust fishing effort. Portuguese landings are expected to increase.

#### **5.17.6 Data issues**

The variables Totrepcost (repair costs) and Totinvest (investment), were not estimated in 2010, are the data from the answers in the survey. The calculation of total harmonised FTE (TOTHARMFTE) and total national FTE (TOTNATFTE), for 2009 are based on the number of months as the number of days were not available for this activity. However, the same variables for 2010 are based in number of days.

Data for 2011 and 2012 are provisional and maybe be subject to changes in the future.

For the collection of economic data, a probability sample survey with Stratified Random Sampling was used. The sample size is determined to ensure a coefficient of variation does not exceed 5%, for the variable income (reference year n-1), at the fleet segment level.

Some fleet segments may be sampled exhaustively if this results in improving the quality of the estimates. The Portuguese national fleet is dominated by small scale artisanal fishery, which are inherently (polyvalent vessels with many gears targeting many different species), owners without organised financial account) the most difficult to obtain accurate estimates.



## 5.18 ROMANIA

### 5.18.1 National fleet structure

In 2012 the Romanian fishing fleet consisted of 510 registered vessels, with a combined gross tonnage of 0.92 thousand GT and total power of 7.08 thousand kW and an average age of 17.4 years (Table 5.18.1). The size of the Romanian fishing fleet has followed an increasing trend between 2008 and 2010. The number of vessels increased 16% (or 69 vessels) while the total GT and kW of the fleet declined by 55% and 38%, respectively during the same period (fig. 5.18.1).

Table 5.18.1 Romania national fishing fleet key indicators: 2008-2012

	2008	2009	2010	2011	2012	% change
<b>Capacity</b>						
Number of vessels	441	441	430	488	510	15.6
Average vessel age	19	21	21	17	17	-6.2
Gross Tonnage (GT, thousand)	2.3	2.3	1.0	0.9	0.9	-60.5
Power (kW, thousand)	8.7	8.7	5.4	7.0	7.1	-18.7
<b>Effort</b>						
Days at sea (thousand)	3.7	6.3	6.5	2.8		-24.3
Fishing days (thousand)	3.7	3.9	4.1	2.6		-29.7
Energy consumption (Million litres)	0.1	0.3	0.2			85.6
<b>Employment</b>						
Total Employed	875	289	444			-49.3
FTE	649	244	403			-37.9
<b>Landings</b>						
Weight (thousand tonnes)	0.4	0.3	0.2	0.5		20.8
Value (Million €)	0.7	0.6	0.5	1.4		96.2

(Source: EU Member States DCF data submissions)

The total number of fishing enterprises in the Romanian fleet was 105 in 2011. The vast majority of fishing enterprises, 83%, owned a single vessel and 19% of enterprises owned two to five fishing vessels. Only 3 fishing enterprises owned six or more fishing vessels. Total employment was around 444 jobs and 403 FTEs in the Romanian fleet in 2010. The level of employment increased between 2009 and 2010, with the total number employed increasing by 53% and the number of FTEs increasing by 65% over the time period (Table 5.18.1; fig. 5.18.1).

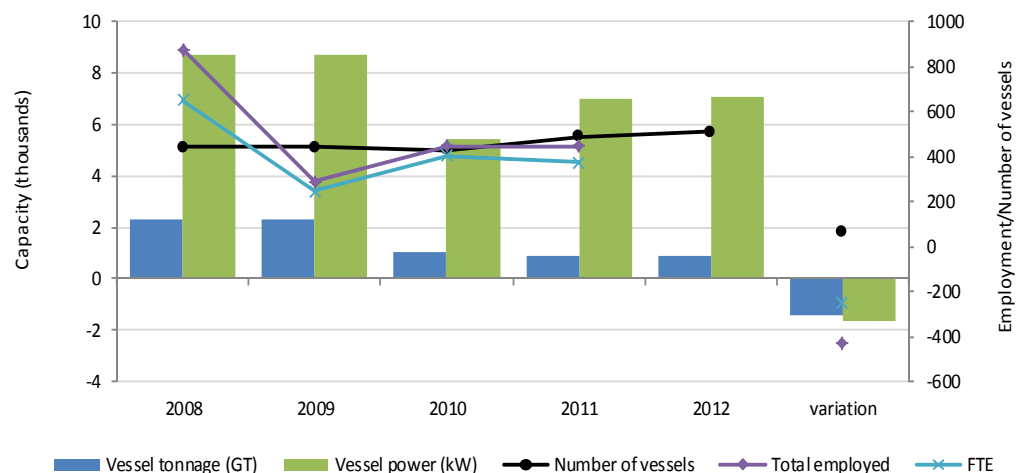


Figure 5.18.1 Romania national fleet capacity and employment trends: 2008-2012  
(Source: EU Member States DCF data submissions)

### 5.18.2 National fleet fishing activity and output

In 2011 the Romanian fishing fleet spent a total of around 6.5 thousand days at sea (Table 5.18.1), 57% of which were actual fishing days. The total number of days at sea increased by around 75% between 2008 and 2010, while total fishing days remained stable during the same period. The total quantity of fuel consumed in 2010 was 0.21 million litres, an increase of around 90% between 2008 and 2010 (fig. 5.18.2, left). The total volume of landings achieved by the Romanian fleet in 2010 was 0.23 thousand tonnes of seafood. The total volume of landings declined between 2008 and 2010, but increased two-fold in 2011, amounting to 5.3 thousand tonnes and 1.4 million € in landed value (fig. 5.18.2, right).

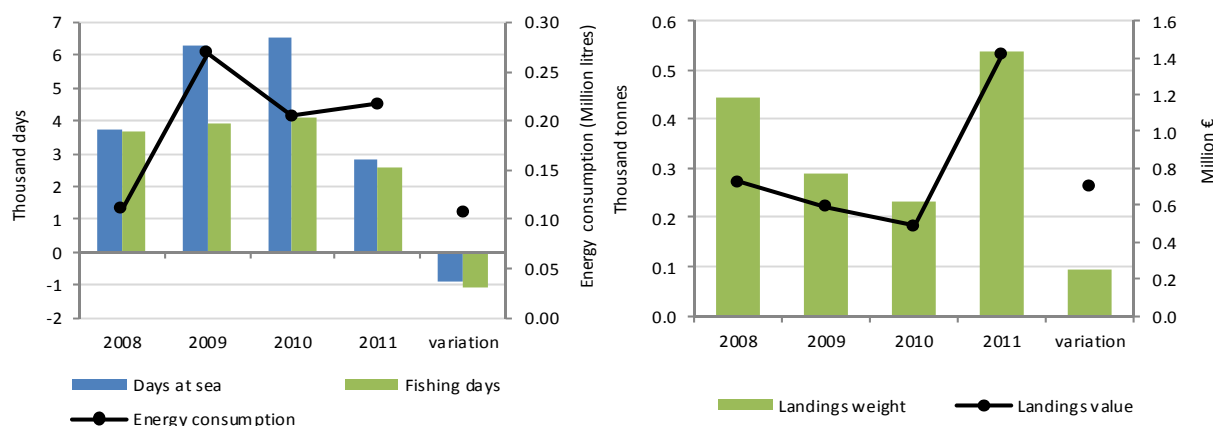


Figure 5.18.2 Romania national fleet fishing effort (left) and landings trends (right): 2008-2011  
(Source: EU Member States DCF data submissions)

In 2010, turbot accounted for the highest value of landings (€2.3 million) as well as in weight (0.48 thousand tonnes) by the national fleet. In 2011, turbot was replaced by Thomas' rapa whelk, which accounted for €0.89 million in landed value (fig. 5.18.3, left). In terms of landings composition, in 2011 Thomas' rapa whelk was also the most common species landed in terms of weight (0.22 thousand

tonnes), followed by European sprat (0.13 thousand tonnes) and Pontic shad (0.05 thousand tonnes) (fig. 5.18.3, right).

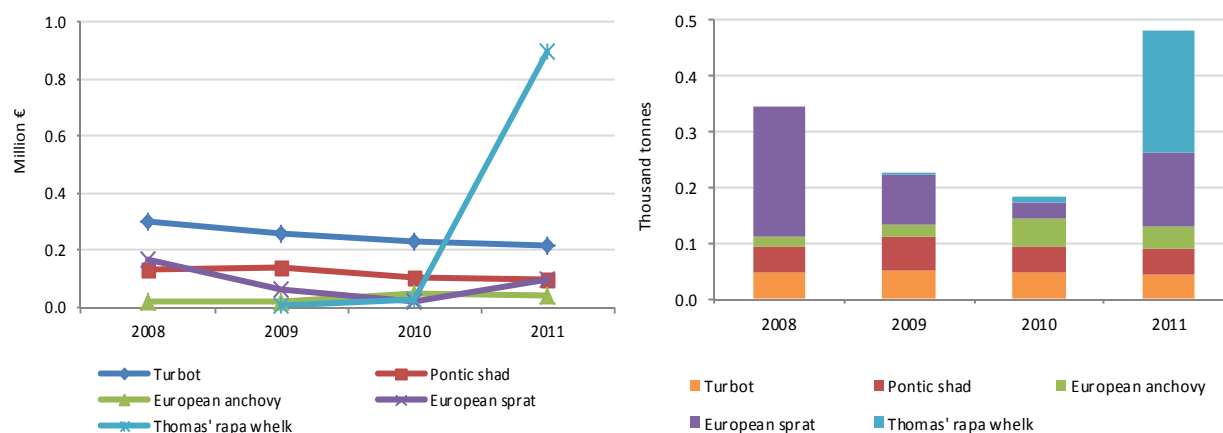


Figure 5.18.3 Romania national fleet total landings by key species in value (left) and weight (right): 2008-2011  
(Source: EU Member States DCF data submissions)

The prices obtained for these key species generally declined between 2008 and 2010. In terms of prices turbot achieved the highest average price per kilo (€4.79 per kg) by the Romanian national fleet in 2010, followed by Thomas' rapa whelk (€2.46 per kg) and Pontic Shad (€2.19 per kg) (fig. 5.18.4, left).

In terms of species turnover, between 2008 and 2010 turbot ranked first, accounting between 41 and 47% of the total landings value. In 2011, Thomas' rapa whelk represented almost 63% of the total value of landings, a significant increase from 6% in 2010 (fig. 5.18.4, right).

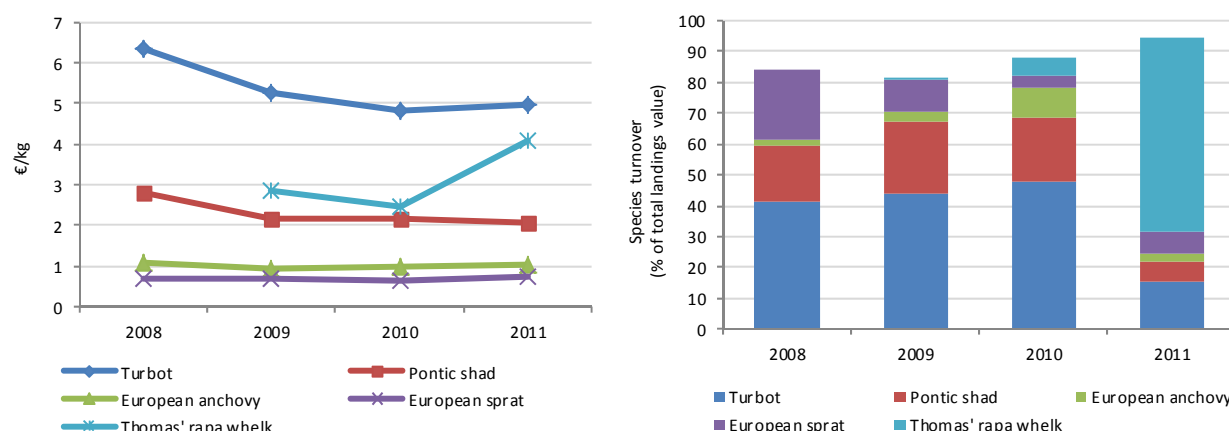


Figure 5.18.4 Total average price (left) and turnover as a percentage of total value of landings (right) for the five key species landed by the Romania national fleet: 2008-2011  
(Source: EU Member States DCF data submissions)

### 5.18.3 National fleet economic performance

The total amount of income generated by the Romanian national fleet in 2010 was €0.49 million. This consisted of total landings values, without any fishing rights sales, non-fishing income, and direct subsidies (Table 5.18.2). The total income of the Romanian fleet decreased 33% between 2008 and

2010. Total expenditure by the Romanian national fleet in 2010 was €0.45 million, amounting to 92% of total income. The largest expenditure items were fuel costs (€0.21 million) and wages (€0.19 million). Between 2008 and 2010, the total expenditure of the Romanian fleet decreased by 41%, fluctuating between €0.76 million and €0.45 million, largely due to wages and salary (Table 5.18.2; fig. 5.18.5).

In terms of profitability, the total amount of GVA, gross profit and net profit generated by the Romanian national fleet in 2010 was €0.24 million, €0.05 million and €0.03 million, respectively (Table 5.18.2, fig. 5.18.5).

Table 5.18.2 Romania national fishing fleet economic performance indicators: 2008-2011.

Forecast figures for 2011 are highlighted in blue and values are also presented as a percentage of total income (shaded grey columns)

	2008	As % of total income	2009	As % of total income	2010	As % of total income	2011	As % of total income	% change (2010-08)
<b>Income (Million €)</b>									
Landings income	0.72	95.7%	0.59	100.0%	0.49	100.0%	1.41	100.0%	-33.0%
Direct subsidies	0	0%	0	0%	0	0%	0	0%	
Other income	0	0%	0	0%	0	0%	0	0%	
Fishing rights income	0	0%	0	0%	0	0%	0	0%	
<i>Total Income</i>	0.76	100%	0.59	100%	0.49	100%	1.41	100%	-35.9%
<b>Expenditure (Million €)</b>									
Crew wages	0.47	62.3%	0.21	35.9%	0.20	40.3%	0.54	38.2%	-58.5%
Unpaid labour	0	0%	0	0%	0	0%	0	0%	
Energy costs	0.13	17.7%	0.06	10.0%	0.21	42.3%	0.26	18.2%	53.3%
Repair costs	0.05	6.6%	0.03	4.6%	0.02	5.0%	0.08	5.7%	-51.4%
Variable costs	0.05	6.9%	0.02	2.9%	0.01	2.5%	0.22	15.8%	-76.5%
Non-variable costs	0	0%	0	0%	0	0%	0	0%	
Rights costs	0	0%	0	0%	0	0%	0	0%	
<i>Total operating costs</i>	0.71	93.5%	0.31	53.3%	0.44	90.2%	1.10	78.0%	-38.2%
Depreciation costs	0.05	6.5%	0.01	1.9%	0.01	3.0%	0.10	7.4%	-70.2%
Opportunity costs of capital	0	0%	0	0%	0	0%	0	0.0%	
<b>Performance Indicators (Million €)</b>									
Gross value added (GVA)	0.49	64.5%	0.48	82.5%	0.24	50.1%	1.29	91.3%	-50.2%
Gross profit	0.02	2.2%	0.27	46.7%	0.05	9.8%	0.75	53.1%	192.4%
Net profit (incl. subsidies)	-0.03	-4.3%	0.26	44.7%	0.03	6.8%	0.74	52.2%	200.2%
Net profit (excl. subsidies)	-0.03	-4.3%	0.26	44.7%	0.03	6.8%	0.74	52.2%	200.2%
<b>Capital value (Million €)</b>									
Fleet depreciated replacement value		n/a		n/a		n/a			
Investment		n/a		n/a		n/a			

(Source: EU Member States DCF data submissions)

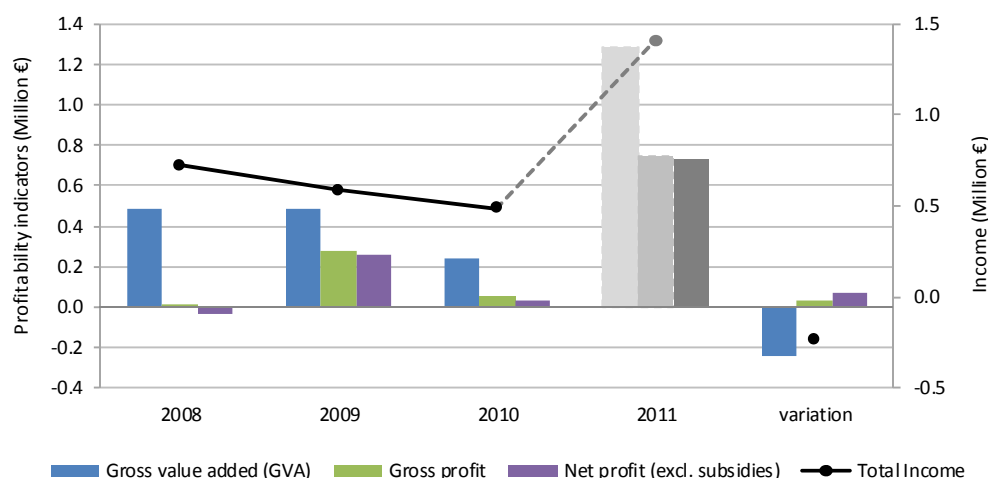


Figure 5.18.5 Romania national fishing fleet economic performance trends: 2008-2011  
(Source: EU Member States DCF data submissions)

#### 5.18.4 Fleet composition

The Romanian national fleet consisted of 5 fleet segments in 2010. The Romania fleet is not highly diversified with a few different vessel types targeting several species in the Black Sea. There were 6 inactive length classes consisting of 223 vessels. These vessels are classed as inactive if they did not land any catch in 2010. Two of the active segments made losses in 2010 while 3 made a relative overall profit. Table 5.18.3 provides a breakdown of key performance indicators for all Romanian fleet segments in 2010. A short description of the three most important segments in terms of total value of landings is provided below.

Table 5.18.3 Romania national fishing fleet composition and key indicators at fleet segment level for 2010

Fleet Segment	Number of vessels	Vessel tonnage (GT)	Vessel power (kW)	Total employed	FTE (national)	Days at sea	Energy consumption (kilolitres)	Landings weight (tonnes)	Landings value (thousand €)	Direct Subsidies (thousand €)	GVA (thousand €)	Gross profit (thousand €)	Net profit (excl. subsidies) (thousand €)	Net Profit (incl. subsidies) (thousand €)
<b>PG</b>	<b>198</b>	<b>196</b>	<b>1709</b>	<b>408</b>	<b>384</b>	<b>6511</b>	<b>204</b>	<b>217</b>	<b>453</b>	<b>0</b>	<b>212</b>	<b>18</b>	<b>3</b>	<b>3</b>
VL0006	35	28	429	58	49	859	16	21	40	0	20	3.3	2.1	2.1
VL0612	163	168	1280	350	335	5652	188	195	413	0	193	14	0.9	0.9
<b>PMP</b>	<b>7</b>	<b>5</b>	<b>19</b>	<b>28</b>	<b>14</b>	<b>15</b>	<b>1</b>	<b>14</b>	<b>32</b>	<b>0</b>	<b>31</b>	<b>30</b>	<b>30</b>	<b>30</b>
VL0006	1	0.53	3.7	4	2	3	0.02	0.13	0.12	0	0.07	-0.01	-0.01	0.00
VL0612	6	4	15	24	12	12	1	14	31	0	31	30	30	30
<b>TM</b>	<b>1</b>	<b>136</b>	<b>331</b>	<b>8</b>	<b>5</b>	<b>2</b>	<b>0.4</b>	<b>0.2</b>	<b>0.4</b>	<b>0</b>	<b>-0.01</b>	<b>-0.14</b>	<b>-0.14</b>	<b>-0.14</b>
VL2440	1	136	331	8	5	2	0.4	0.2	0.4	0	-0.01	-0.14	-0.14	-0.14

(Source: EU Member States DCF data submissions)

**PG VL0006** – 35 vessels make up this segment and are based in the Black Sea. These vessels target pelagic species such as Pontic shad, European anchovy and turbot. The total value of landings was €40 thousand and around 49 FTEs were employed in this fleet segment in 2010, contributing to 8% and 12% of the total income from landings and FTEs generated by the MS fishing fleet, respectively. This fleet segment was profitable, with reported modest profits of around €2 thousand in 2010.

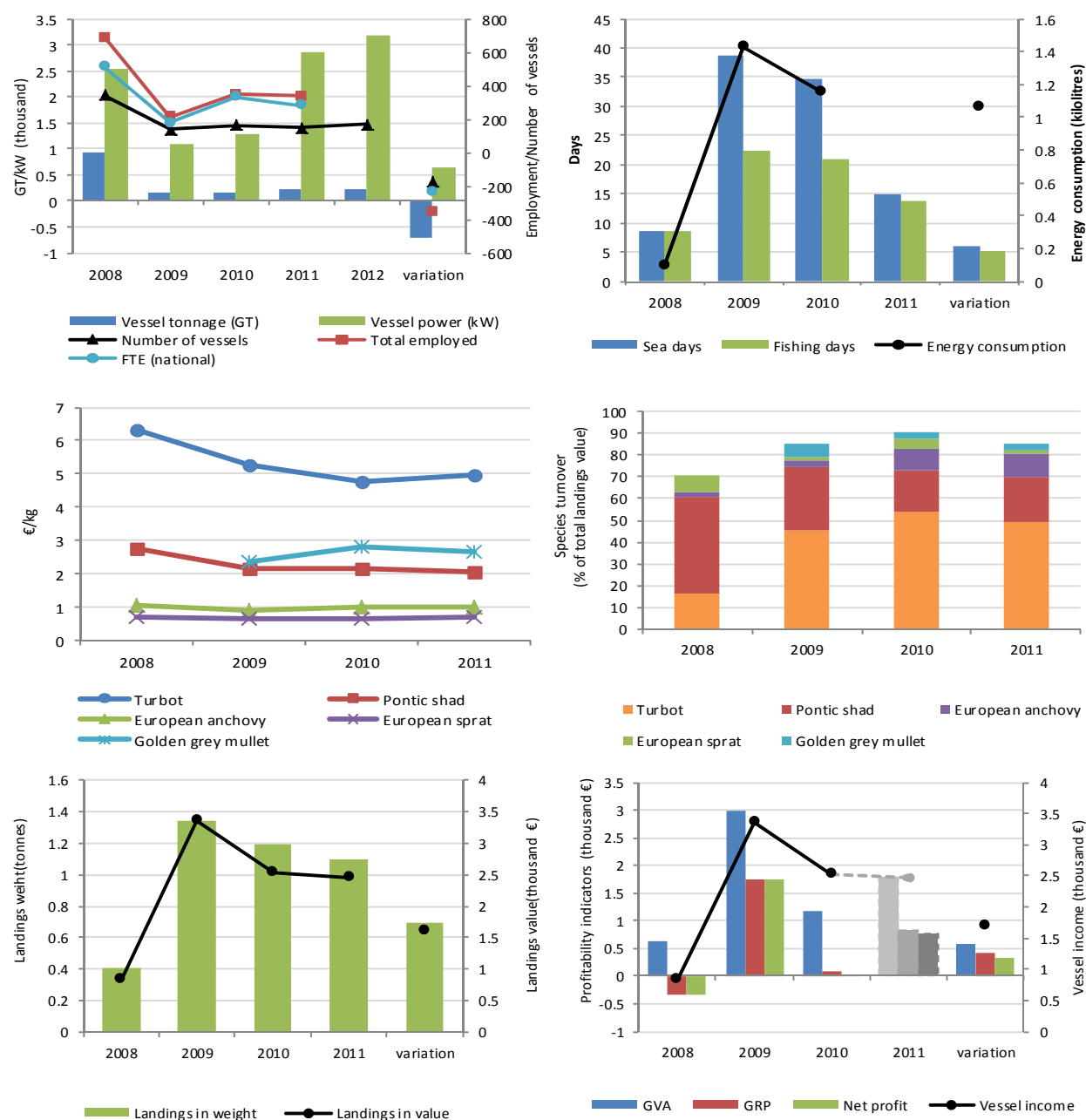


Figure 5.18.6 Key indicators for the average vessel in the Romanian PG VL0612 fleet segment, 2008-2011: top left – fleet capacity and employment; top right – fishing activity and effort; middle left – average prices (€/kg) for key species; middle right - turnover as a percentage of total value of landings for key species; bottom left - landings in value and weight: bottom right –main economic indicators for the average vessel (variation 2010-2008)

(Source: EU Member States DCF data submissions)



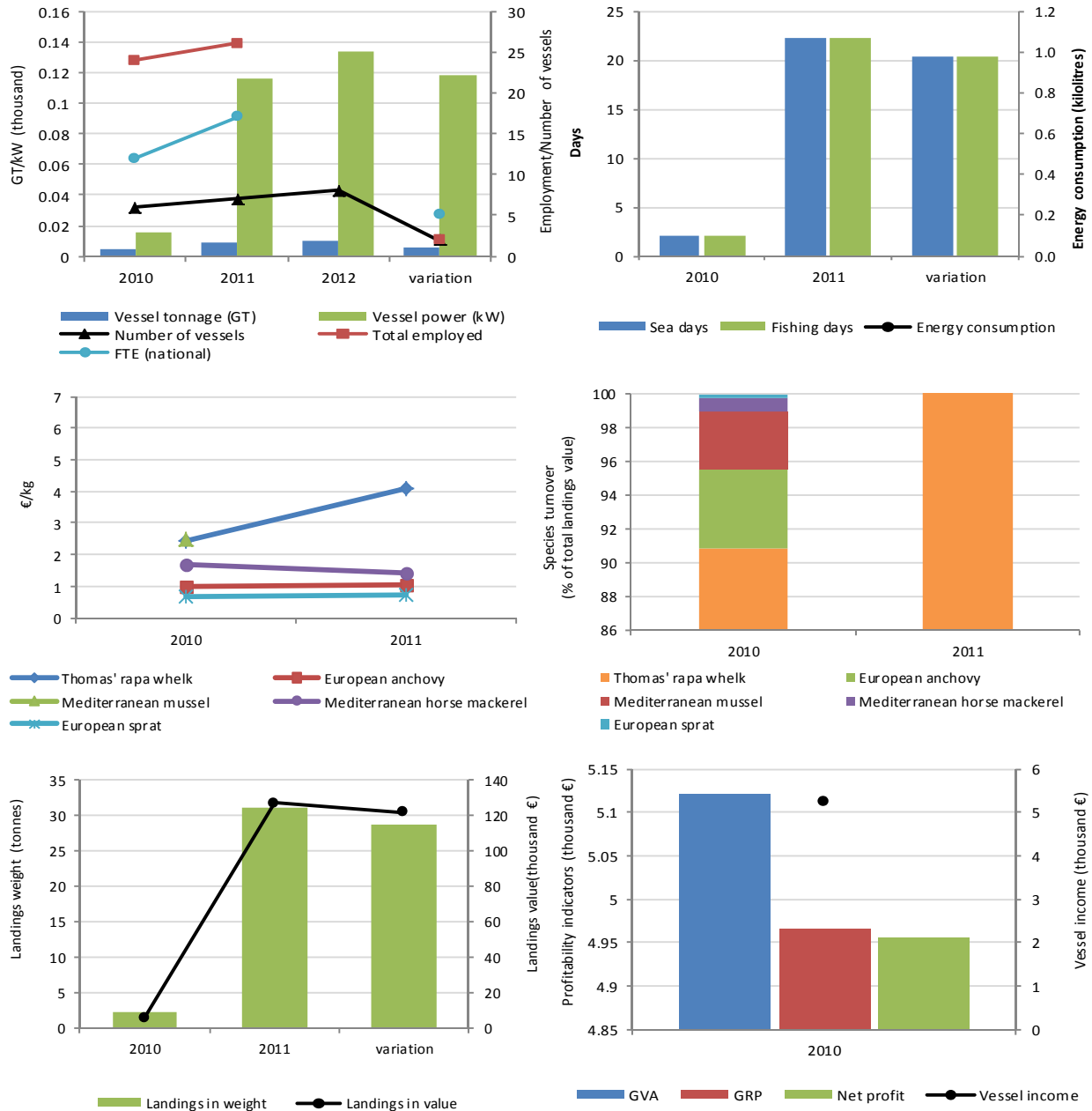


Figure 5.18.7 Key indicators for the average vessel in the Romanian PMP VL0612 fleet segment, 2008-2011:

top left – fleet capacity and employment; top right – fishing activity and effort; middle left – average prices (€/kg) for key species; middle right - turnover as a percentage of total value of landings for key species; bottom left - landings in value and weight; bottom right –main economic indicators for the average vessel (variation 2010-2008). No data available for years 2008 and 2009

(Source: EU Member States DCF data submissions)

**PG VL0612** – Around 163 vessels make up this segment and operate in the Black Sea. The fleet targets a variety of species, such as European anchovy, Pontic shad and turbot. The total value of landings was €413 thousand and around 335 FTEs were employed in this fleet segment in 2010, contributing to 85% and 83% of the total income from landings and FTEs generated by the MS fishing fleet, respectively. This fleet segment made very modest profits in 2010 (fig.5.18.6).

**PMP VL0612** – 6 vessels make up this segment and operate in the Black Sea. These vessels target pelagic species, such as Thomas'rapa whelk and European anchovy. The total value of landings was €32 thousand and 12 FTEs were employed in this fleet segment in 2010, contributing to 6.5% and 3% of the total income from landings and FTEs generated by the MS fishing fleet, respectively. This fleet segment made a modest in 2010 (fig. 5.18.7).

#### **5.18.5 Assessment for 2011 and 2012**

In 2011, 58 new vessels were registered in in the Romanian fleet. Landings increased by 200% mainly due to increase of numbers of vessels registered in Romanian Fleet and targeted species such as Thomas' rapa whelk (value of landing increased by 29% between 2010 and 2011).

#### **5.18.6 Data issues**

Data for 2008 were available for the 5 segments. However, as Romania only started collecting economic data in 2008, data for this year was considered inconsistent with the subsequent years data.

## 5.19 SLOVENIA

### 5.19.1 National fleet structure

In 2012 the Slovenian fishing fleet consisted of 186 registered vessels, with a combined gross tonnage of one thousand GT, total power of 10,86 thousand kW and an average age of 36,7 years (Table 5.19.1). The size of the Slovenian fishing fleet followed a relatively stable trend between 2008 and 2012. The number of vessels increased by 3% (or 5 vessels) while total GT and kW both increased by 2% during the same period (fig. 5.19.1).

The Slovenian national economy is insignificantly influenced by the Slovenian marine fisheries sector. However, the sector has an important social impact on employment within the fishing industry. The break point period of Slovenian marine fisheries began with the independence of Slovenia in 1991. This period marked a decrease in the extent of fishing regions and a substantial loss of markets for seafood products. A large number of poorly equipped small scale fisherman, inadaptability of large scale fisherman, along with discordance among fishing, producing and marketing capabilities brought the sector into crisis. Landings of almost 6 thousand tonnes in 1990 decreased to 719 tonnes in 2011.

In 2011, the Slovenian fisheries sector is still affected by the small size of its sea fishing area. The existence of two marine reserves where all fishing activities are banned (Portorož and Strunjan fishery reserves) to a large extent limit the Slovenian fishing opportunities. This negatively impacts the sector, in particular, sea fishermen who are engaged only in small-scale coastal fishing.

Table 5.19.1 Slovenian national fishing fleet key indicators: 2008-2012

	2008	2009	2010	2011	2012	% change
<b>Capacity</b>						
Number of vessels	181	185	185	186	186	2.8
Average vessel age	33	34	35	36	37	9.9
Gross Tonnage (GT, thousand)	1.0	1.0	1.0	1.0	1.0	2.2
Power (kW, thousand)	10.7	11.0	11.0	10.9	10.9	1.9
<b>Effort</b>						
Days at sea (thousand)	n/a	n/a	7.7	n/a		
Fishing days (thousand)	n/a	n/a	7.7	n/a		
Energy consumption (Million litres)	n/a	n/a	0.6			
<b>Employment</b>						
Total Employed	109	117	116			6.4
FTE	85	90	82			-3.4
<b>Landings</b>						
Weight (thousand tonnes)	0.7	0.9	0.8	0.7		4.9
Value (Million €)	2.1	2.2	2.0	2.5		22.1

(Source: EU Member States DCF data submissions)

The number of fishing enterprises in the Slovenian fleet totalled 134 in 2011. The vast majority of fishing enterprises, 62,7%, owned a single vessel and 36,57% of enterprises owned two to five fishing vessels. Only one fishing enterprise owned six or more fishing vessels. The Slovenian fishing fleet consists predominantly of small vessels under 12 meters (but mostly vessels up to 6 meters). A typical Slovenian fishing enterprise is represented by a self-employed fisherman owning one fishing vessel of about six meters in length.

Total employment was around 116 jobs and 82 FTEs in the Slovenian fleet in 2010. The level of employment increased between 2008 and 2010, with the total number employed increasing by 6% and FTEs decreasing by 3.5% over the time period (Table 5.19.1; fig. 5.19.1). The reduction of fishing capacity, weight and value of landings has also had a negative impact in terms of FTE employment for those who make a living from fisheries.

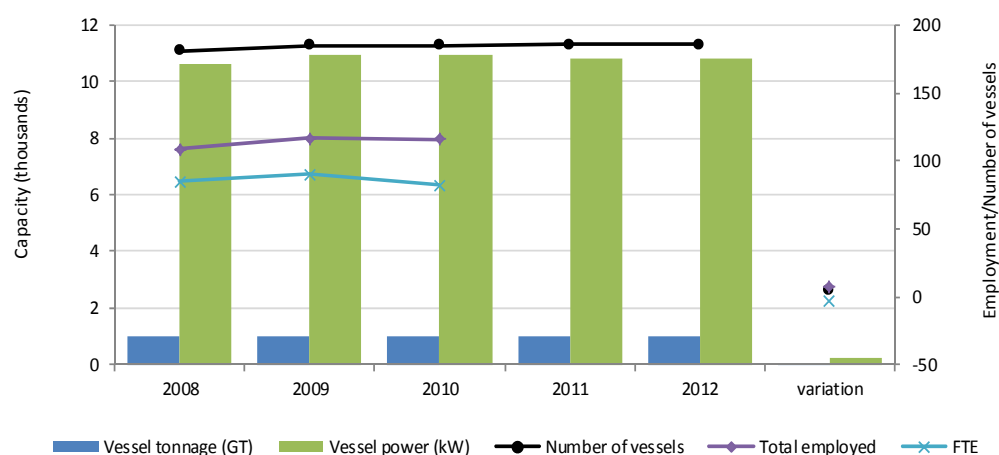


Figure 5.19.1 Slovenian national fleet capacity and employment trends: 2008-2012  
(Source: EU Member States DCF data submissions)

### 5.19.2 National fleet fishing activity and output

In 2011 the Slovenian fishing fleet spent a total of around nine thousand days at sea 100% of which were actual fishing days. In 2010, this value was lower, estimated at 7.7 thousand days (Table 5.19.1). The total quantity of fuel consumed in 2010 was 600 thousand litres (fig. 5.19.2, left). The total volume of landings achieved by the Slovenian fleet in 2011 was 0.72 thousand tonnes of seafood and valued at almost €2 million, which has remained relatively stable since 2008 (fig. 5.19.2, right).

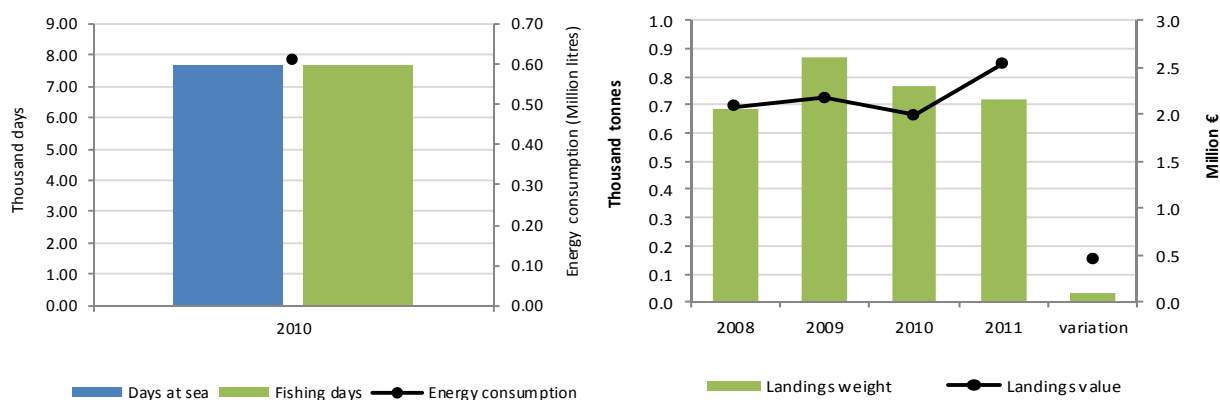


Figure 5.19.2 Slovenian national fleet fishing effort (left) and landings trends (right): 2008-2011  
(Source: EU Member States DCF data submissions)

The Slovenian fisheries sector is affected by the reduced size of its sea fishing area. For this reason most fish stocks are overexploited, resulting in a low volumes of landings. Most of the fishing fleets are poorly

equipped and unable fish in international waters. High fuel prices led to reduced fuel consumption in 2010 relative to previous years. Due to the high fuel prices, fishing trips were shorter and consequently there were less FTE employees and lower landings.

In 2010 European pilchard (=Sardine) accounted for the highest value of landings (€0,57 million) by the national fleet, followed by European squid (€0,28 million) and then European anchovy (€0,24 million) (fig. 5.19.3). The key species both in terms of value and weight landed by the Slovenian fishing fleet are the same with the exception of the common sole, which was replaced by the musky octopus in terms of weight in 2010. In terms of landings composition, in 2011 European pilchard (=Sardine) was the most common species landed in terms of tonnage (0,31 thousand tons), followed by European anchovy (0,16 thousand tons) and Whiting (0,06 thousand tons) (fig. 5.19.3).

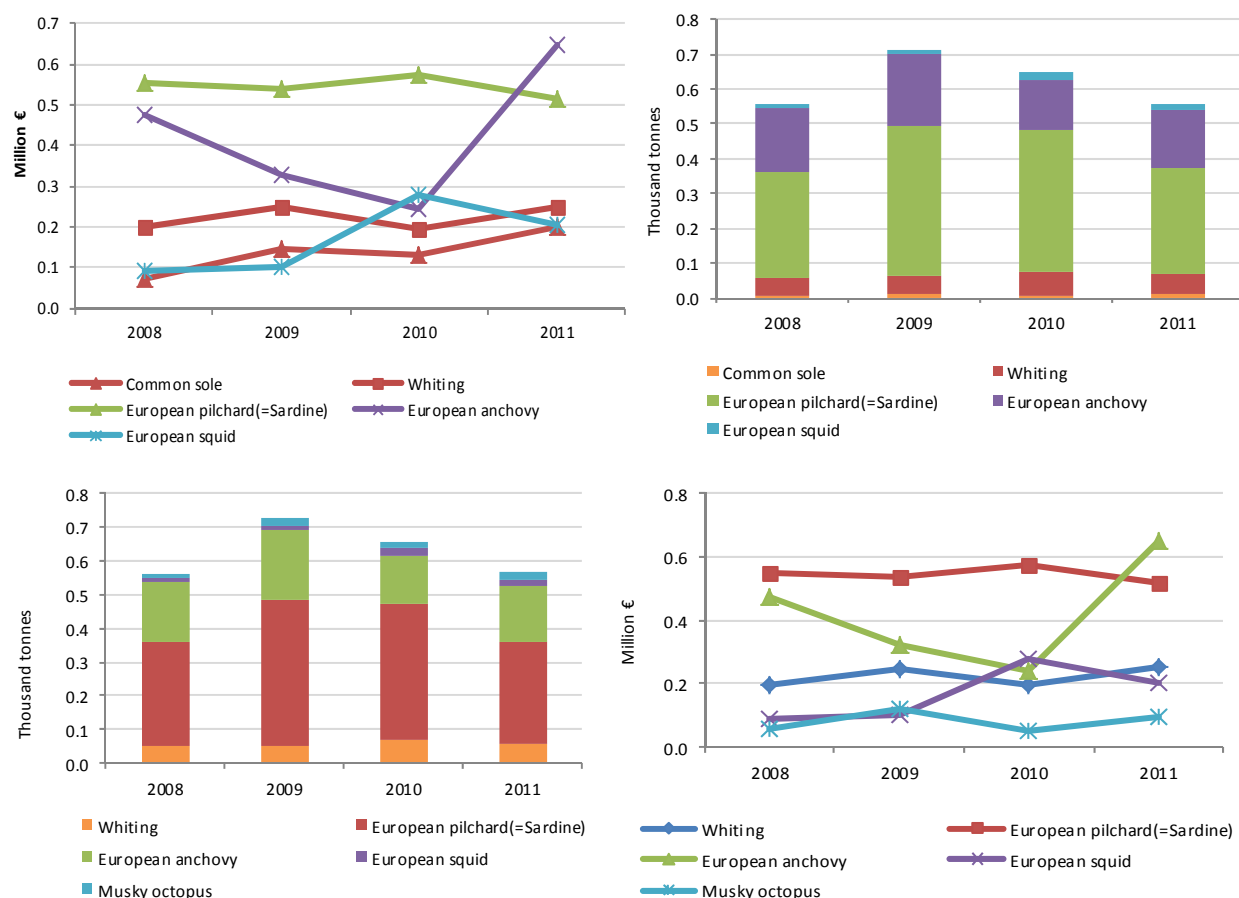


Figure 5.19.3 Slovenian national fleet total landings by key species in value (top) and weight (bottom):2008-2011  
(Source: EU Member States DCF data submissions)

The prices obtained for these key species generally declined between 2008 and 2011, except for the common sole and whiting, which remained relatively stable. In terms of average first-sale prices, in 2010 common sole achieved the highest average price per kilo by the Slovenian national fleet (€15,48 per kg), followed by European squid (€11,74 per kg) and Whiting (€2,9 per kg) (fig. 5.19.4, left).

The European pilchard accounted for 29% of the total landed value, followed by squid at 14% and anchovy at 12%. In 2011, anchovy ranked first in terms of species turnover (fig. 5.19.4, right).

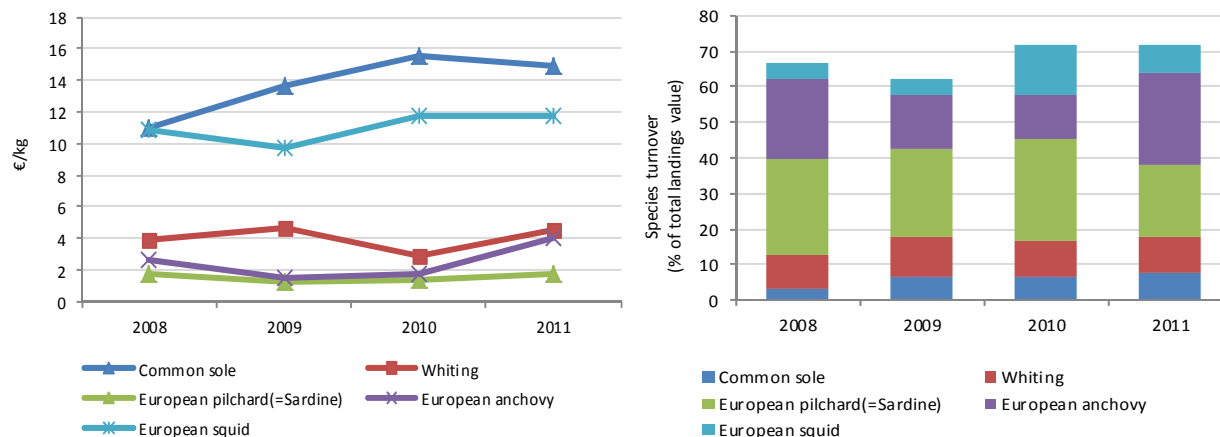


Figure 5.19.4 Total average price (left) and turnover as a percentage of total value of landings (right) for the five key species landed by the Slovenian national fleet: 2008-2011  
(Source: EU Member States DCF data submissions)

### 5.19.3 National fleet economic performance

The total amount of income generated by the Slovenian national fleet in 2010 was €2,4 million. This consisted of €2 million in landings values and €0,4 million in non-fishing income (Table 5.19.2). The total income of the Slovenian fleet remained relatively stable between 2008 and 2010 (fig. 5.19.5).

Total expenditure by the Slovenian national fleet in 2010 equated to €3,1 million. The largest expenditure items were crew wages (€1,1 million) and repair and maintenance costs (€0,7 million) (Table 5.19.2). Between 2008 and 2010, the total expenditure of the Slovenian fleet increased by 55%, fluctuating between €2 million and €3 million, largely due to changes in crew wages, major repair and maintenance costs and changes in fuel prices.

In terms of profitability, the total amount of GVA, gross loss and net loss generated by the Slovenian national fleet in 2010 was €0,46 million, -€0,8 million and -€1,1 million, respectively. In 2010, the Slovenian fleet had an estimated capital value of €3,5 million and investments in the range of 0.4 million € (Table 5.19.2; fig. 5.19.5).

Table 5.19.2 Slovenian national fishing fleet economic performance indicators: 2008-2011.

Forecast figures for 2011 are highlighted in blue and values are also presented as a percentage of total income (shaded grey columns)

	2008	As % of total income	2009	As % of total income	2010	As % of total income	2011	As % of total income	% change (2010-08)
<b>Income (Million €)</b>									
Landings income	2.08	87.3%	2.17	91.4%	1.99	82.2%	2.54	88.9%	-4.1%
Direct subsidies	0.08	3.3%	0	0%	0	0%	0	0%	-100%
Other income	0.22	9.4%	0.20	8.6%	0.43	17.8%	0.32	11.1%	93.6%
Fishing rights income	0	0%	0	0%	0	0%	0	0%	
<i>Total Income</i>	2.38	100%	2.38	100%	2.42	100%	2.86	100%	1.8%
<b>Expenditure (Million €)</b>									
Crew wages	n/a		n/a		1.11	45.8%	0.68	23.7%	
Unpaid labour	n/a		n/a		0.19	7.7%	0.11	4.0%	
Energy costs	n/a		n/a		0.70	28.8%	n/a		
Repair costs	n/a		n/a		0.97	39.9%	n/a		
Variable costs	n/a		n/a		0.26	10.9%	n/a		
Non-variable costs	n/a		n/a		0.03	1.3%	0.03	1.1%	
Rights costs	n/a		n/a		0	0%	0	0.0%	
<i>Total operating costs</i>	n/a		n/a		3.26	134.6%	0.82	28.9%	
Depreciation costs	n/a		n/a		0.20	8.4%	0.10	3.5%	
Opportunity costs of capital	n/a		0.12	4.8%	0.06	2.5%	0.05	1.8%	
<b>Performance Indicators (Million €)</b>									
Gross value added (GVA)	n/a		n/a		0.46	19.0%	2.82	98.9%	
Gross profit	n/a		n/a		-0.84	-34.6%	2.03	71.1%	
Net profit (incl. subsidies)	n/a		n/a		-1.10	-45.4%	1.93	67.6%	
Net profit (excl. subsidies)	n/a		n/a		-1.10	-45.4%	1.93	67.6%	
<b>Capital value (Million €)</b>									
Depreciation (replacement) costs	2.75	115.7%	3.33	140.4%	3.53	145.8%	3.43	120.3%	28.3%
Investments	0.1	4%	0.2	9%	0.4	16%	n/a		
Financial position (%)	47.2		51.9		59.3		n/a		

(Source: EU Member States DCF data submissions)

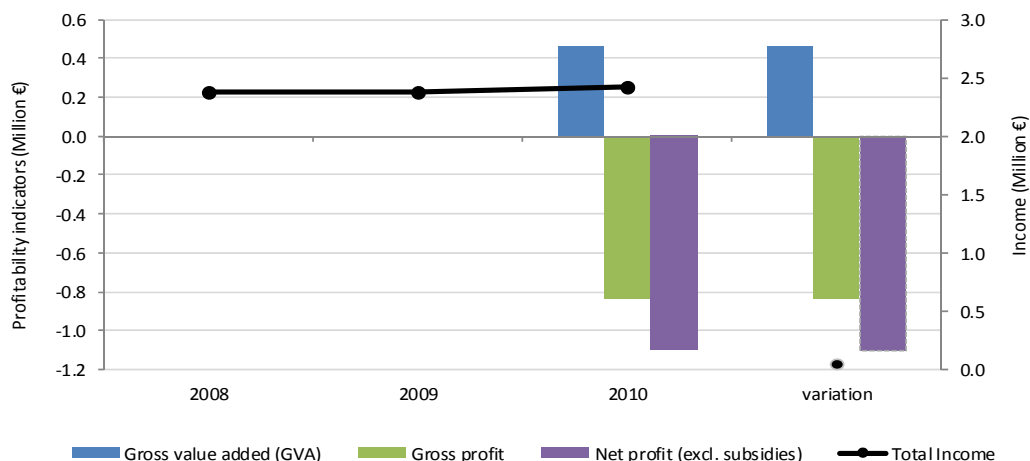


Figure 5.19.5 Slovenian national fishing fleet economic performance trends: 2008-2011  
(Source: EU Member States DCF data submissions)

#### 5.19.4 Fleet composition

The Slovenian national fleet consisted of 17 fleet segments in 2010. The Slovenian fleet is highly diversified with a broad range of vessel types targeting different species predominantly in the Adriatic Sea in Mediterranean area. There were 4 inactive length classes consisting of 94 vessels. These vessels are classed as inactive if they did not land any catch in 2010. 10 of the active segments made losses in 2010 while 3 made an overall profit.

In 2010 in Slovenia were 91 active vessels of which around 64 (70% of all active vessels) are classified in the segment of the small scale fishery. The fleet is characterized by a strong multi-specify and multi-gear activity. The majority of vessels operate in coastal waters of Slovenia.

Table 5.19.3 provides a breakdown of key performance indicators for all Slovenian fleet segments in 2010. A short description of the five most important segments in terms of total value of landings is provided below.

**Fleet segment DFN 06-12** – Around 29 vessels make up this segment and operate predominantly in the Adriatic Sea in the Mediterranean area. These vessels target demersal species, such as sole, common pandora and sea bream. The total value of landings was €0,28 million, with common sole representing around 40% of the value of landings in 2011. European seabass prices has increased during this period, attaining €17 per kilo. Around 34 FTEs were employed in this fleet segment in 2010, contributing to 14% and 41,52% of the total income from landings and FTEs generated by the MS fishing fleet, respectively. This fleet segment made a loss in 2010 (fig. 5.19.6).

**Fleet segment TM 24-40** – 2 vessels make up this segment and are based predominantly in the Adriatic Sea in the Mediterranean area. These vessels target pelagic species. The most important are European pilchard (Sardine) and anchovy. The total value of landings was €0,48 million and around 2 FTEs were employed in this fleet segment in 2010, contributing to 24% and 2,4% of the total income from landings and FTEs generated by the MS fishing fleet, respectively. This fleet segment was unprofitable, with reported losses of around €0,55 million in 2010 (fig. 5.19.7).



Table 5.19.3 Slovenian national fishing fleet composition and key indicators at fleet segment level for 2010

Fleet Segment	Number of vessels	Vessel tonnage (GT)	Vessel power (kW)	Total employed	FTE (national)	Days at sea	Energy consumption (kilolitres)	Landings weight (tonnes)	Landings value (thousand €)	Direct Subsidies (thousand €)	GVA (thousand €)	Gross profit (thousand €)	Net profit (excl. subsidies) (thousand €)	Net Profit (incl. subsidies) (thousand €)
<b>DFN</b>	<b>57</b>	<b>151</b>	<b>2596</b>	<b>62</b>	<b>53.0</b>	<b>4674</b>	<b>61</b>	<b>44</b>	<b>384</b>	<b>0</b>	<b>59</b>	<b>-270</b>	<b>-326</b>	<b>-326</b>
VL1218	2	30	353	2	1.5	128	7	2	13			-11	-15	-15
VL0006	26	25	319	26	17.5	1876	10	9	92		16	-123	-133	-133
VL0612	29	96	1925	34	34.0	2670	43	34	278		43	-136	-178	-178
<b>DTS</b>	<b>18</b>	<b>243</b>	<b>2694</b>	<b>20</b>	<b>17.3</b>	<b>1563</b>	<b>229</b>	<b>133</b>	<b>603</b>	<b>0</b>	<b>98</b>	<b>-201</b>	<b>-273</b>	<b>-273</b>
VL1218	11	196	1777	13	13.0	1222	212	103	471		59	-168	-229	-229
VL0612	7	47	917	7	4.3	341	17	30	132		38	-33	-44	-44
<b>FPO</b>	<b>5</b>	<b>18</b>	<b>186</b>	<b>5</b>	<b>2.8</b>	<b>340</b>	<b>6</b>	<b>1</b>	<b>9</b>	<b>0</b>	<b>-4</b>	<b>-48</b>	<b>-56</b>	<b>-56</b>
VL1218	1	12	110	1	0.4	76	3.5	0.2	0.9		-3	-14	-19	-19
VL0006	3	3	43	3	2.1	226	2.0	1	7.3		-5	-28	-30	-30
VL0612	1	3	33	1	0.2	38	0.6	0.2	0.8		4	-6	-7	-7
<b>HOK</b>	<b>2</b>	<b>12</b>	<b>98</b>	<b>2</b>	<b>0.2</b>	<b>79</b>	<b>1.4</b>	<b>0.2</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>-24</b>	<b>-28</b>	<b>-28</b>
VL0006	1	1	3	1	0.0	1.0		0.03	0		-3	-12	-15	-15
VL0612	1	11	96	1	0.2	78	1.4	0.2	1		4	-11	-14	-14
<b>PMP</b>	<b>3</b>	<b>11</b>	<b>83</b>	<b>3</b>	<b>1.6</b>	<b>234</b>	<b>8.3</b>	<b>8</b>	<b>64</b>	<b>0</b>	<b>354</b>	<b>226</b>	<b>188</b>	<b>188</b>
VL0612	3	11	83	3	1.6	234	8	8	64		354	226	188	188
<b>PS</b>	<b>4</b>	<b>47</b>	<b>473</b>	<b>12</b>	<b>6.0</b>	<b>466</b>	<b>32</b>	<b>161</b>	<b>451</b>	<b>0</b>	<b>383</b>	<b>165</b>	<b>116</b>	<b>116</b>
VL1218	4	47	473	12	6.0	466	32	161	451		383	165	116	116
<b>TM</b>	<b>2</b>	<b>312</b>	<b>1200</b>	<b>12</b>	<b>1.1</b>	<b>339</b>	<b>271</b>	<b>416</b>	<b>481</b>	<b>0</b>	<b>-270</b>	<b>-527</b>	<b>-551</b>	<b>-551</b>
VL2440	2	312	1200	12	1.1	339	271	416	481		-270	-527	-551	-551

(Source: EU Member States DCF data submissions)

**Fleet segment DTS 06-12** – 7 vessels make up this segment and operate predominantly in Adriatic Sea in Mediterranean area. These vessels target a demersal species, such as Whiting, Musky octopus and European squid. The total value of landings was €0,13 million and around 4 FTEs were employed in this fleet segment in 2010, contributing to 6,6% and 5,3% of the total income from landings and FTEs generated by the MS fishing fleet, respectively. This fleet segment made a modest profit in 2010.

**Fleet segment DTS 12-18** – Around 11 vessels make up this segment and operate predominantly in the Adriatic Sea. The fleet targets a variety of species, with the most important being whiting, musky octopus and European squid. The total value of landings was €0,47million and around 13 FTEs were employed in this fleet segment in 2010, contributing to 24% and 16% of the total income from landings and FTEs generated by the MS fishing fleet, respectively. This fleet segment made a loss in 2010.

**Fleet segment PS 12-18** – 4 vessels make up this segment and are based predominantly in the Adriatic Sea in the Mediterranean area. These vessels target pelagic species. The most important being European pilchard (Sardine) and anchovy. The total value of landings was €0,45 million and around 6 FTEs were employed in this fleet segment in 2010, contributing to 22,6% and 7,3% of the total income from landings and FTEs generated by the MS fishing fleet, respectively. This fleet segment was highly profitable, with reported profits of around €0,13 million in 2010.

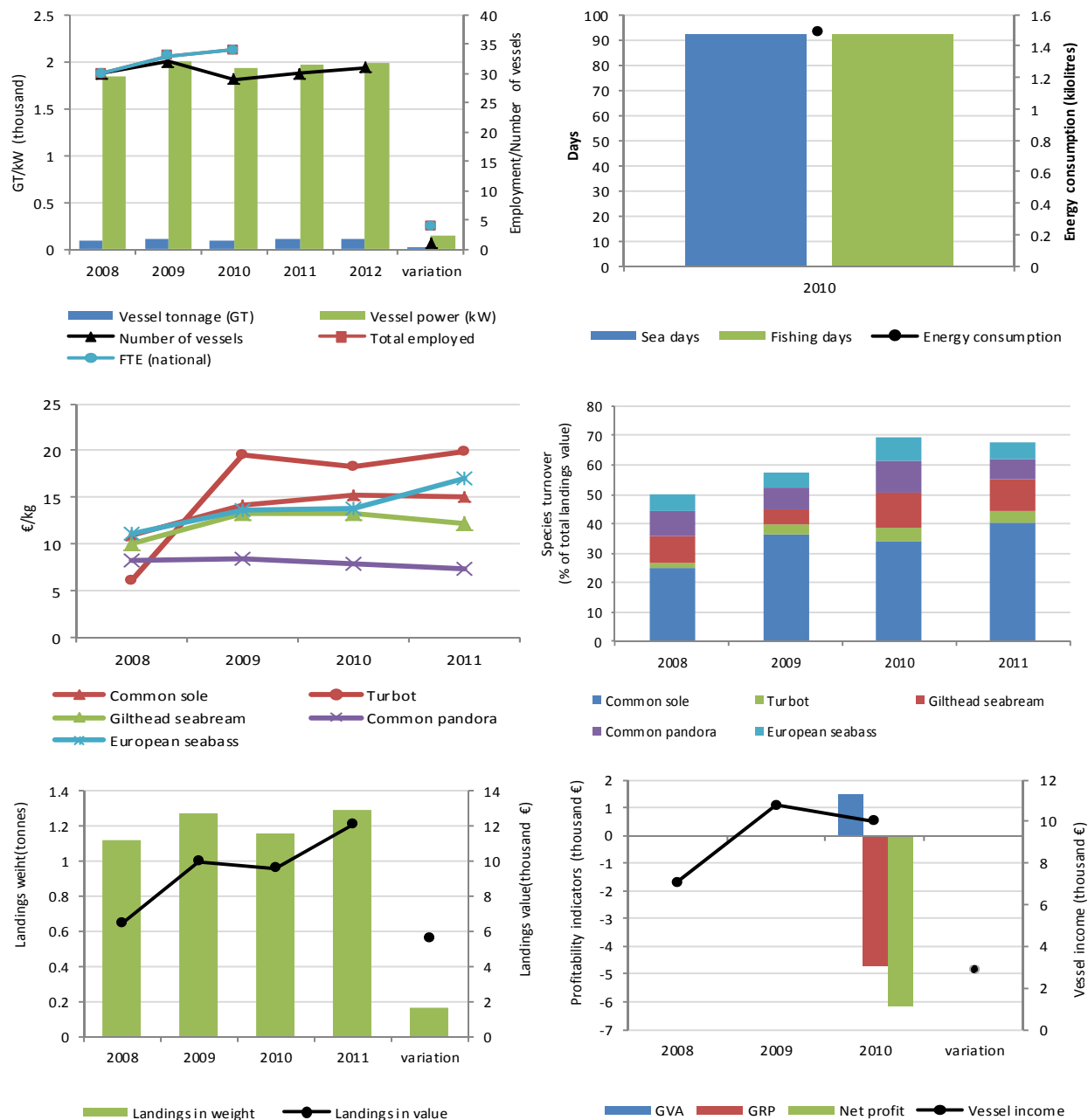


Figure 5.19.6 Key indicators for the average vessel in the Slovenian DFN VL0612 fleet segment, 2008-2011: top left – fleet capacity and employment; top right – fishing activity and effort; middle left – average prices (€/kg) for key species; middle right - turnover as a percentage of total value of landings for key species; bottom left - landings in value and weight; bottom right –main economic indicators for the average vessel (variation 2010-2008)

(Source: EU Member States DCF data submissions)

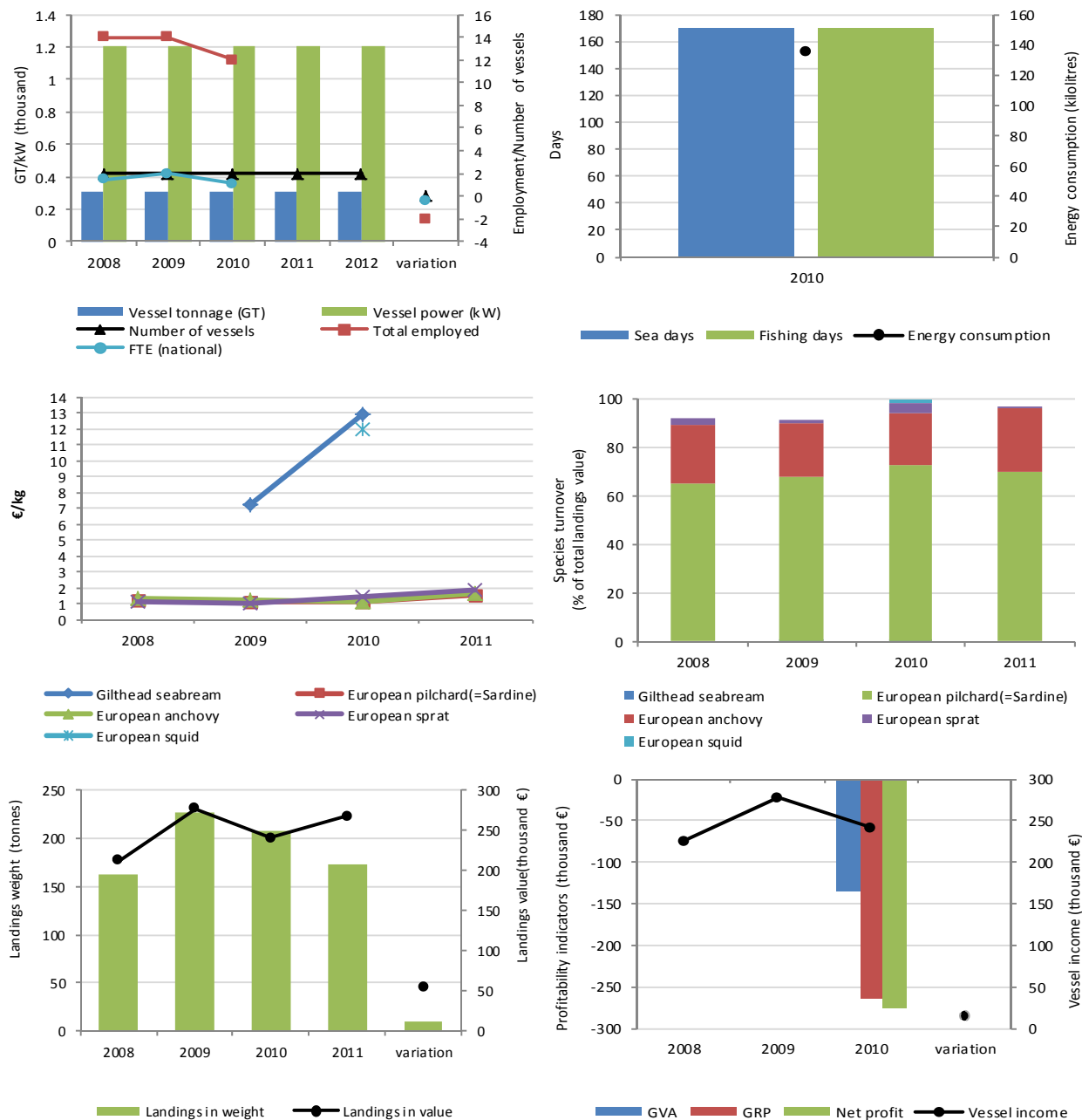


Figure 5.19.7 Key indicators for the average vessel in the Slovenian TM VL2440 fleet segment 2008-2011: top left – fleet capacity and employment; top right – fishing activity and effort; middle left – average prices (€/kg) for key species; middle right - turnover as a percentage of total value of landings for key species; bottom left - total landings in value and weight: bottom right –main economic indicators for the average vessel (variation 2010-2008)

(Source: EU Member States DCF data submissions)

#### **5.19.5 Assessment for 2011 and 2012**

The future development of the Slovenian fishing fleet is delineated in the Operational Program for Fisheries Development in the Republic of Slovenia 2007-2013 (OP). The OP foresees the following measures related to the fishing fleet within its priority axes:

Priority axis 1: Adaptation of the fishing fleet (the goal of this axis is to achieve a balance between the capacity of the Slovenian fishing fleet and the available fisheries resources): permanent cessation of fishing activities; measures on board fishing vessels (in order to improve the working conditions and safety of fishermen) and improving the selectivity of fishing gear; measures focused on small-scale coastal fishing.

Priority axis 2: Measures of common interest: collective actions for the improvement of safety and working conditions for the fishermen; measures to improve existing ports and landing sites.

Priority axis 3: Sustainable development of fisheries areas: opportunities for the diversification of fishing activities (e.g. into fishing tourism).

Number of vessels, GT and kW will remain relatively stable in 2011 and 2012. Effort will probably increase in 2011 and 2012, because of low fish stocks in the Adriatic Sea. If fishermen want to hold the volume of landings at the current levels, they will have to increase the number of fishing days. Landings volume has decreased since 1990, so we can expect that the volume of landings will decrease also in 2011 and 2012. Fuel consumption depends on the price of the fuel. The fuel prices were high in 2011. This trend continues also into 2012. In the first third of 2012, fuels prices reached record high levels, so we can expect decreasing fuel consumption despite increased number of fishing days.

When the crisis ends, we can expect increases in fish prices. This will also have an effect on income which will also increase, of course, assuming that the catch volume remains unchanged. The level of expenditure depends mostly on crew wages, repair and maintenance costs and fuel costs. We can expect that fuel costs will increase in 2011 and 2012, while on the other hand crew wages will probably decrease, due to a decreased number of employees. Because of the old and poorly equipped fleet we can expect increases in repair and maintenance costs in 2011 and 2012.

Because the fleet is old, reduced catches and increased costs may be expected, so much so that profit will decline in 2011 and 2012. Due to the poor condition and profitability of Slovenian fishing fleet, we cannot expect increases in GVA, gross profit and net economic profit.

#### **5.19.6 Data issues**

The economic variables were collected for all vessels regardless of their activity. All economic variables were collected for active vessels. For inactive vessels only capacity indicators and capital value were collected. The economic variables were reported for each segment of the fleet as provided in Appendix III of the Commission Decision (EC) 949/2008. A vessel was allocated into a particular segment by taking into account which fishing gear prevails with regard to the number of fishing days (i.e. the vessel uses that gear more than 50% of its time fishing).

The socio-economic data on the fishing sector were collected mostly from accounting records – AJPES, from data base InfoRib, through questionnaires and sales notes. In the monitoring programme all fishing vessels were included (approximately 180 units). The data collected from all sources were combined in such a way that a complete set of accounting items is compared for each business enterprise.

The target population was all fishing sector in Slovenia. There were approximately 100 companies or fishermen in Slovenia. In March 2011 the questionnaires for 2010 were sent to all users of fishing vessels

in Slovenia. In cases where a questionnaire, as the only source, was used the response rate was 60%. In cases where the data from annual accounts of business enterprises was used the response rate was 100%, because we have economic reports for all investigated companies or fishermen.

In case of Slovenian data, there are some differences between Eurostat and DCF data. The differences are in the Value of Landings data for 2008 and 2009. In the calculation of Value of Landings DCF use data on fish prices for each fleet segment separately, on the other hand Eurostat use the average price of all segments.



## 5.20 SPAIN

### 5.20.1 National fleet structure

No data on fleet capacity (number of vessels, GT, kW) have been provided for the Spanish fleet therefore analysis of capacity trends is not possible.

Table 5.20.1 Spain national fishing fleet key indicators: 2008-2012

	2008	2009	2010	2011	2012	% change
<b>Capacity</b>						
Number of vessels	n/a	n/a	n/a	n/a	n/a	n/a
Average vessel age	n/a	n/a	n/a	n/a	n/a	n/a
Gross Tonnage (GT, thousand)	n/a	n/a	n/a	n/a	n/a	n/a
Power (kW, thousand)	n/a	n/a	n/a	n/a	n/a	n/a
<b>Effort</b>						
Days at sea (thousand)	n/a	n/a	n/a	n/a		
Fishing days (thousand)	n/a	n/a	n/a	n/a		
Energy consumption (Million litres)	674.9	745.9	719.2			6.6
<b>Employment</b>						
Total Employed	65359	38045	39281			-39.9
FTE	30695	35844	33678			9.7
<b>Landings</b>						
Weight (thousand tonnes)	n/a	n/a	n/a	n/a		n/a
Value (Million €)	n/a	n/a	n/a	n/a		n/a

(Source: EU Member States DCF data submissions)

The total number of fishing enterprises in the Spanish fleet was 9586 in 2010. The vast majority of fishing enterprises, 93.5%, owned a single vessel and 6.4% owned two to five fishing vessels. Only 6 fishing enterprises owned six or more fishing vessels. Total employment was estimated at around 39281 jobs and 33678 FTEs in the Spanish fleet in 2010. The level of employment decreased between 2008 and 2010, with the total number employed decreasing by 40% and the number of FTEs increasing by 10% over the time period analysed (Table 5.20.1; fig. 5.20.1).

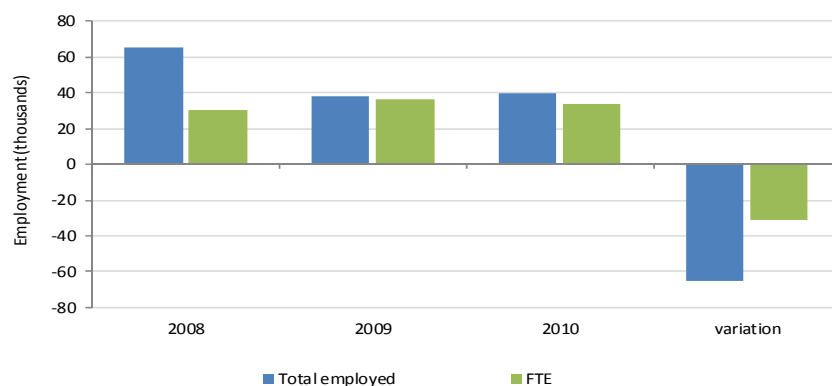


Figure 5.20.1 Spain national fleet employment trends: 2008-2010

(Source: EU Member States DCF data submissions)

No capacity data available

### 5.20.2 National fleet fishing activity and output

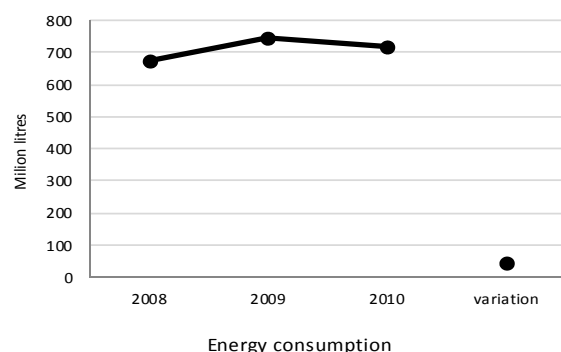


Figure 5.20.2 Spain national fleet fuel consumption trends (right):2008-2010  
(Source: EU Member States DCF data submissions)

No effort and landings data available

### 5.20.3 National fleet economic performance

The total amount of income generated by the Spanish national fleet in 2010 was €1806 million. This consisted of €1758 million in landings values, €0.6 million in fishing rights sales, €15.8 million in non-fishing income, and €32.6 million in direct subsidies (Table 5.20.2). The total income of the Spanish fleet increased 20% between 2008 and 2010 (fig. 5.20.3). Total expenditure by the Spanish national fleet in 2010 was €1793 million, amounting to 99% of total income. The largest expenditure items were crew wages (€522 million) and fuel costs (€356 million) (Table 5.20.2). Between 2008 and 2010, the total expenditure of the Spanish fleet increased by 11%, fluctuating between €1615 million and €1793 million.

In terms of profitability, the total amount of GVA, gross profit and economic profit (excluding subsidies) generated by the Spanish national fleet in 2010 was €752 million, €120.7 million and €20.8 million, respectively (Table 5.20.2, fig. 5.20.3).



Table 5.20.2 Spain national fishing fleet economic performance indicators: 2008-2011.

Forecast figures for 2011 are highlighted in blue and values are also presented as a percentage of total income (shaded grey columns)

	2008	As % of total income	2009	As % of total income	2010	As % of total income	2011	As % of total income	% change (2010-08)
<b>Income (Million €)</b>									
Landings income	1445.2	96.3%	1846.5	96.7%	1757.5	97.3%	n/a	n/a	21.6%
Direct subsidies	56.26	3.7%	62.79	3.3%	32.58	1.8%	n/a	n/a	-42.1%
Other income	0.0	0.0%	0.0	0.0%	15.76	0.9%	n/a	n/a	
Fishing rights income	0.0	0.0%	0.0	0.0%	0.55	0.0%	n/a	n/a	
<b>Total Income</b>	<b>1501.4</b>	<b>100%</b>	<b>1909.2</b>	<b>100.0%</b>	<b>1806.4</b>	<b>100.0%</b>	<b>n/a</b>	<b>n/a</b>	<b>20.3%</b>
<b>Expenditure (Million €)</b>									
Crew wages	425.2	28.3%	598.6	31.4%	522.1	28.9%	n/a	n/a	22.8%
Unpaid labour	83.0	5.5%	137.1	7.2%	109.9	6.1%	n/a	n/a	32.4%
Energy costs	380.0	25.3%	346.4	18.1%	355.7	19.7%	n/a	n/a	-6.4%
Repair costs	109.1	7.3%	141.3	7.4%	133.1	7.4%	n/a	n/a	22.1%
Variable costs	174.5	11.6%	201.9	10.6%	408.9	22.6%	n/a	n/a	134.4%
Non-variable costs	343.8	22.9%	452.8	23.7%	123.0	6.8%	n/a	n/a	-64.2%
Rights costs		0.0%		0.0%	8.2	0.5%	n/a	n/a	
<b>Total operating costs</b>	<b>1515.5</b>	<b>100.9%</b>	<b>1878.1</b>	<b>98.4%</b>	<b>1660.7</b>	<b>91.9%</b>	<b>n/a</b>	<b>n/a</b>	<b>9.6%</b>
Depreciation costs	99.3	6.6%	156.0	8.2%	132.5	7.3%	n/a	n/a	33.4%
Opportunity costs of capital	0.0	0.0%	0.0	0.0%	0.0	0.0%	n/a	n/a	
<b>Performance Indicators (Million €)</b>									
Gross value added (GVA)	437.8	29.2%	704.1	36.9%	752.6	41.7%	n/a	n/a	71.9%
Gross profit	-70.4	-4.7%	-31.6	-1.7%	120.7	6.7%	n/a	n/a	271.5%
Net profit (incl. subsidies)	-113.4	-7.6%	-124.8	-6.5%	20.8	1.2%	n/a	n/a	118.3%
Net profit (excl. subsidies)	-169.7	-11.3%	-187.6	-9.8%	-11.8	-0.7%	n/a	n/a	93.1%
<b>Capital value (Million €)</b>									
Fleet Depreciated replacement value	n/a		n/a		n/a				
Investments	n/a		n/a		n/a				
Financial position (%)	n/a		n/a		n/a				

(Source: EU Member States DCF data submissions)

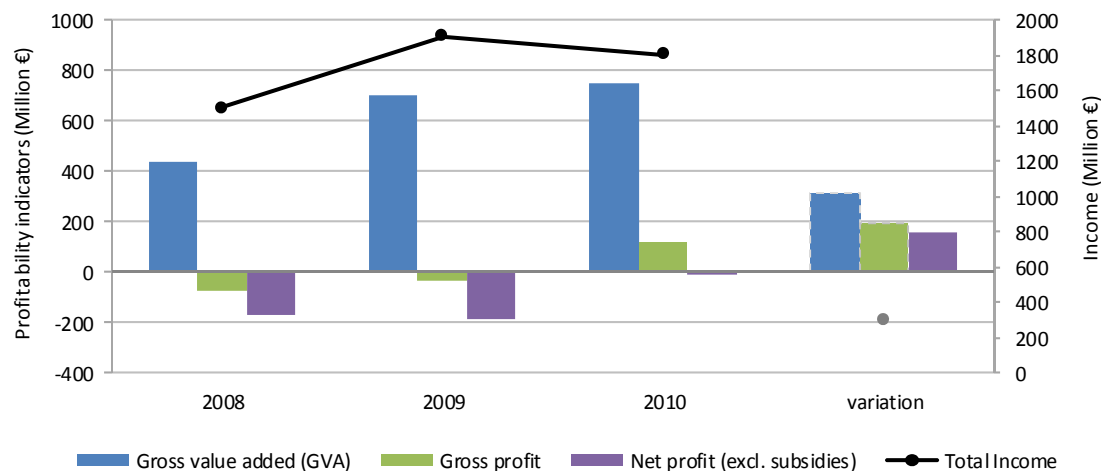


Figure 5.20.3 Spain national fishing fleet economic performance trends: 2008-2011

(Source: EU Member States DCF data submissions)

#### 5.20.4 Fleet composition

The Spanish national fleet consisted of 29 fleet segments in 2010. The Spanish fleet is highly diversified with a broad range of vessel types targeting different species predominantly in the areas 27 and 37. A total of 14 of the active segments made losses in 2010 while 14 made an overall profit.

Table 5.20.3 provides a breakdown of key performance indicators for all Spanish fleet segments in 2010. A short description of the five most important segments in terms of total value of landings is provided below.

**Demersal trawl / seine 18-24m** – Vessels in this segment operate predominantly in areas 27 and 37, and target a variety of species. The total value of landings was €98 million and around 2279 FTEs were employed in this fleet segment in 2010, contributing to 6% and 7% of the total income from landings and FTEs generated by the MS fishing fleet, respectively. This fleet segment was unprofitable, with reported loss of €6.5 million in 2010.

**Demersal trawl / seine 24-40m** – This segment is based predominantly in areas 27 and 37 and target a variety of species. The total value of landings was €317 million and around 5669 FTEs were employed in this fleet segment in 2010, contributing to 18% and 17% of the total income from landings and FTEs generated by the MS fishing fleet, respectively. This fleet segment was highly unprofitable, generating a reported loss of around €20 million in 2010 (fig. 5.20.4).

**Demersal trawl / seine over 40m** – This segment operates predominantly in area 27 and other regions. The fleet targets a variety of species. This segment made about €248 million in total landings and employed 2058 FTEs were employed in this fleet segment in 2010, contributing to 14% and 6% of the total income from landings and FTEs generated by the MS fishing fleet, respectively. This fleet segment made a substantial profit in 2010, a reported 25 million €.

**Gears using hooks 24-40m** – This segment is based predominantly in area 27. These vessels target a variety of species. The total value of landings was €160 million and around 2268 FTEs were employed in this fleet segment in 2010, contributing to 9% and 7% of the total income from landings and FTEs generated by the MS fishing fleet, respectively. This fleet segment made a modest profit in 2010.

**Purse Seine 24-40m** – This segment operates predominantly in area 27 and targets a variety of species. The total value of landings was €86 million and around 2268 FTEs were employed in this fleet segment in 2010, contributing to 5% and 7% of the total income from landings and FTEs generated by the MS fishing fleet, respectively. This fleet segment made a large profit in 2010 (fig. 5.20.5).

Table 5.20.3 Spain national fishing fleet composition and key indicators at fleet segment level for 2010

Fleet Segment	Number of vessels	Vessel tonnage (GT)	Vessel power (kW)	Total employed	FTE (national)	Days at sea	Energy consumption	Landings weight (tonnes)	Landings value (thousand €)	Direct subsidies	Gross value added (GVA)	Gross profit	Net profit (excl. subsidies) (thousand €)	Net Profit (incl. subsidies) (thousand €)
<b>DFN</b>	<b>n/a</b>	<b>n/a</b>	<b>n/a</b>	<b>684</b>	<b>630</b>	<b>n/a</b>	<b>3753</b>	<b>n/a</b>	<b>n/a</b>	<b>1091.983</b>	<b>9426</b>	<b>913</b>	<b>-475</b>	<b>617</b>
VL1218	n/a	n/a	n/a	189	161	n/a	635	n/a	n/a	167	3068	875	409	576
VL1824	n/a	n/a	n/a	408	409	n/a	2018	n/a	n/a	795	4541	635	-254	540
VL2440	n/a	n/a	n/a	87	60	n/a	1100	n/a	n/a	130	1817	-597	-630	-500
<b>DTS</b>	<b>n/a</b>	<b>n/a</b>	<b>n/a</b>	<b>10107</b>	<b>10960</b>	<b>n/a</b>	<b>376522</b>	<b>n/a</b>	<b>n/a</b>	<b>19767</b>	<b>282778</b>	<b>52628</b>	<b>-14608</b>	<b>5159</b>
VL1218	n/a	n/a	n/a	947	905	n/a	24466	n/a	n/a	3028	16239	546	-4295	-1267
VL1824	n/a	n/a	n/a	2059	2279	n/a	62837	n/a	n/a	2412	40622	6645	-8921	-6509
VL2440	n/a	n/a	n/a	5339	5669	n/a	196818	n/a	n/a	8166	113756	17	-26921	-18756
VL40XX	n/a	n/a	n/a	1710	2058	n/a	91912	n/a	n/a	6161	110972	45111	25287	31448
VL0612	n/a	n/a	n/a	52	49	n/a	490	n/a	n/a	0	1188	309	243	243
<b>HOK</b>	<b>n/a</b>	<b>n/a</b>	<b>n/a</b>	<b>6640</b>	<b>5116</b>	<b>n/a</b>	<b>107752</b>	<b>n/a</b>	<b>n/a</b>	<b>1842.538</b>	<b>101511</b>	<b>1908</b>	<b>-19114</b>	<b>-17271</b>
VL0010	n/a	n/a	n/a	157	107	n/a	597	n/a	n/a	94	908	-4112	-4378	-4284
VL1012	n/a	n/a	n/a	248	222	n/a	766	n/a	n/a	11	3079	-1703	-2230	-2219
VL1218	n/a	n/a	n/a	1726	761	n/a	4570	n/a	n/a	2.7	6663	-7223	-7233	-7230
VL1824	n/a	n/a	n/a	576	352	n/a	6541	n/a	n/a	694	8422	1139	-1217	-524
VL2440	n/a	n/a	n/a	2440	2268	n/a	63249	n/a	n/a	741	57207	10405	1174	1915
VL40XX	n/a	n/a	n/a	978	924	n/a	29189	n/a	n/a	301	16229	1552	-5568	-5268
VL0612	n/a	n/a	n/a	516	481	n/a	2841	n/a	n/a	0	9002	1851	338	338
<b>PGP</b>	<b>n/a</b>	<b>n/a</b>	<b>n/a</b>	<b>1024</b>	<b>632</b>	<b>n/a</b>	<b>19836</b>	<b>n/a</b>	<b>n/a</b>	<b>921</b>	<b>28753</b>	<b>2247</b>	<b>-183</b>	<b>738</b>
VL2440	n/a	n/a	n/a	1024	632	n/a	19836	n/a	n/a	921.1	28752.65	2247	-183	738
<b>PMP</b>	<b>n/a</b>	<b>n/a</b>	<b>n/a</b>	<b>13870</b>	<b>8749</b>	<b>n/a</b>	<b>39937</b>	<b>n/a</b>	<b>n/a</b>	<b>504.0</b>	<b>127554.9</b>	<b>-2136</b>	<b>-10170</b>	<b>-9667</b>
VL0010	n/a	n/a	n/a	8624	4820	n/a	18916	n/a	n/a	199	56684	-6738	-8952	-8754
VL1012	n/a	n/a	n/a	1052	929	n/a	5499	n/a	n/a	202	15657	2151	872	1073
VL1218	n/a	n/a	n/a	1917	1195	n/a	7885	n/a	n/a	0	23182	-4145	-6168	-6168
VL2440	n/a	n/a	n/a	176	143	n/a	1522	n/a	n/a	24	689	-838	-1063	-1038
VL0612	n/a	n/a	n/a	2100	1662	n/a	6116	n/a	n/a	79	31342	7434	5140	5220
VL0006	n/a	n/a	n/a			n/a		n/a	n/a					
<b>PS</b>	<b>n/a</b>	<b>n/a</b>	<b>n/a</b>	<b>6958</b>	<b>7591</b>	<b>n/a</b>	<b>171403</b>	<b>n/a</b>	<b>n/a</b>	<b>8452.876</b>	<b>202615.7</b>	<b>65151</b>	<b>32764.9</b>	<b>41218</b>
VL0010	n/a	n/a	n/a	118	30	n/a	184	n/a	n/a	0	477	-143	-142.996	-143
VL1012	n/a	n/a	n/a	161	158	n/a	509	n/a	n/a	16	2113	-468	-610	-594
VL1218	n/a	n/a	n/a	1715	1276	n/a	5824	n/a	n/a	390	33318	9033	6688.99	7079
VL1824	n/a	n/a	n/a	1957	1798	n/a	8231	n/a	n/a	707	32149	7857	2841	3548
VL2440	n/a	n/a	n/a	1903	2268	n/a	46822	n/a	n/a	926	54432	15951	13101.2	14027
VL40XX	n/a	n/a	n/a	1062	2029	n/a	109746	n/a	n/a	6414	79972	32768	10737.6	17152
VL0612	n/a	n/a	n/a	42	32	n/a	87	n/a	n/a	0	154	154	148.6	149

(Source: EU Member States DCF data submissions)

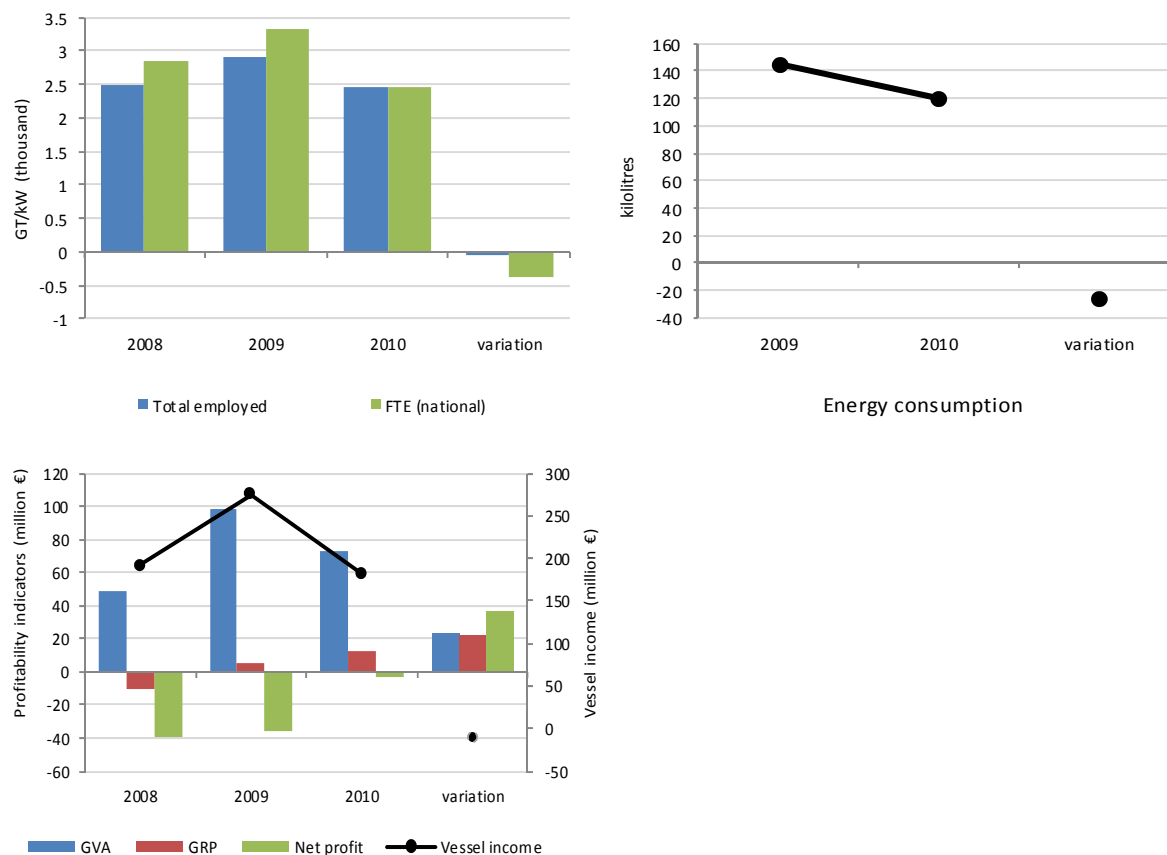


Figure 5.20.4 Key indicators for the average vessel in the Spanish DTS VL2440 fleet segment operating in Area 27, 2008-2010:

top left – fleet segment employment; top right – average fuel consumption; bottom main economic indicators for the average vessel (variation 2010-2008)

(Source: EU Member States DCF data submissions)

Note: No effort and landings data available

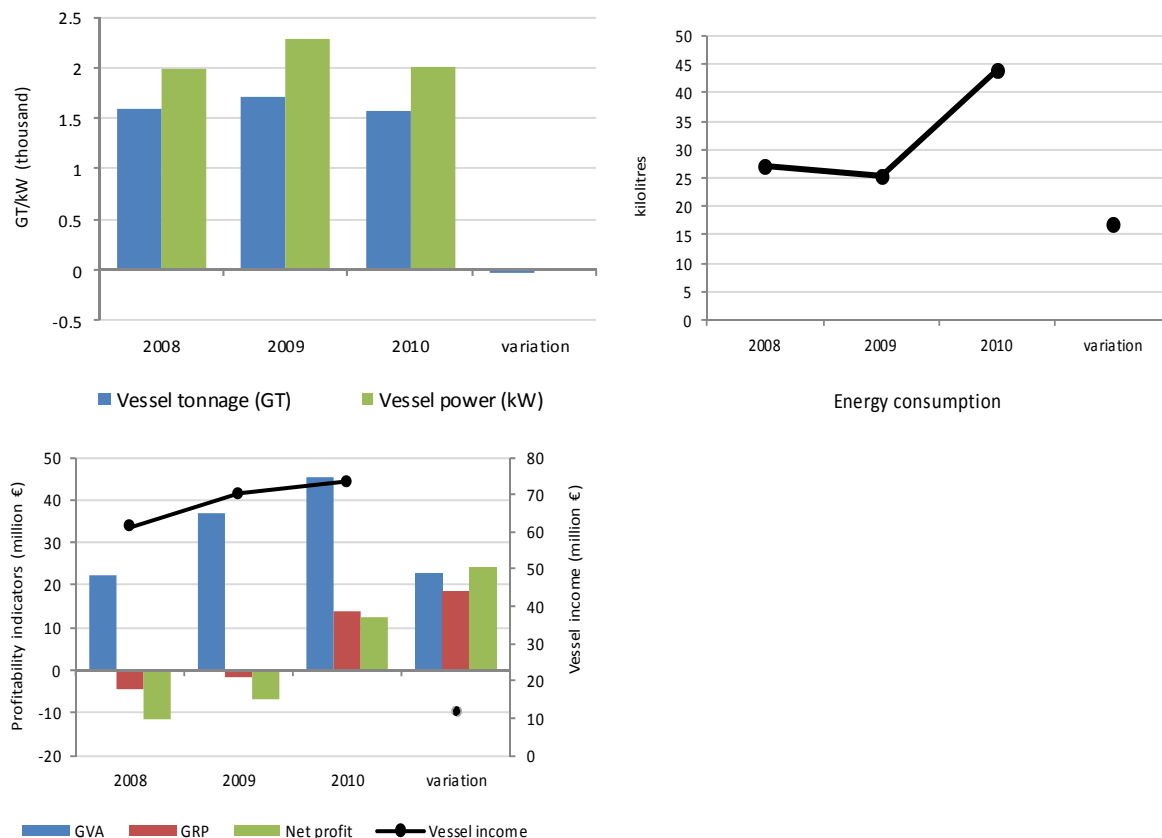


Figure 5.20.5 Key indicators for the average vessel in the Spanish PS VL2440 fleet segment operating in Area 27, 2008-2010:  
top left – fleet segment employment; top right – average fuel consumption; bottom main economic indicators for the average vessel (variation 2010-2008)

(Source: EU Member States DCF data submissions)

Note: No effort and landings data available

### 5.20.5 Assessment for 2011 and 2012

Note: No data available.

### 5.20.6 Data issues

Missing data on capacity, fishing effort (days at sea), and landings volume and value by species. Capital value information also not provided.

Due to significant amounts of missing data, 2012 AER does not contain comprehensive regional analyses, EU overview or fish price analyses.



## 5.21 SWEDEN

### 5.21.1 National fleet structure

In 2012, the Swedish fishing fleet consisted of 1365 registered vessels, with a combined gross tonnage of 29,5 thousand GT, total power of 169 thousand kW and an average age of 32 years (Table 5.21.1). The size of the Swedish fishing fleet has followed a decreasing trend between 2008 and 2012. The number of vessels decreased by 10% (or 144 vessels), while total GT and kW of the fleet declined by 32% and 20%, respectively, during the same period (fig. 5.21.1).

The Swedish management has succeeded to reducing some of the over-capacity. A funded scrapping campaign during late 2009 and 2010, along with the introduction of an ITQ-system in the pelagic fishery have shown to be successful. The small increase of the fleet in 2012 is due to new rules that private fishing-right owners must register their vessels. The traditional fleet has decreased after 2011.

Table 5.21.1 Swedish national fishing fleet key indicators: 2008-2012

	2008	2009	2010	2011	2012	% change
<b>Capacity</b>						
Number of vessels	1509	1471	1417	1359	1365	-9.5
Average vessel age	30	30	31	31	32	5.7
Gross Tonnage (GT, thousand)	43.2	41.7	38.6	32.9	29.5	-31.8
Power (kW, thousand)	212.4	207.8	196.6	178.2	169.5	-20.2
<b>Effort</b>						
Days at sea (thousand)	102.9	96.8	84.8	83.4		-18.9
Fishing days (thousand)	102.9	96.8	84.8	83.4		-18.9
Energy consumption (Million litres)	41.4	33.0	34.0			-17.8
<b>Employment</b>						
Total Employed	1980	1758.5	1764.6			-10.9
FTE	1133	1018.9	989.6			-12.7
<b>Landings</b>						
Weight (thousand tonnes)	214.1	199.4	204.5	172.7		-19.3
Value (Million €)	119.9	106.2	103.3	116.4		-2.9

(Source: EU Member States DCF data submissions)

The total number of fishing enterprises in the Swedish fleet was 1058 in 2011. The vast majority of fishing enterprises, 77%, owned a single vessel and 23% of enterprises owned two to five fishing vessels. Only one fishing enterprises owned six or more fishing vessels.

Total employment was around 1760 jobs and 990 FTEs in the Swedish fleet in 2010. The level of employment decreased between 2008 and 2010, with the total number employed decreasing by 11% and the number of FTEs decreasing by 13% over the time period (Table 5.21.1; fig. 5.21.1).

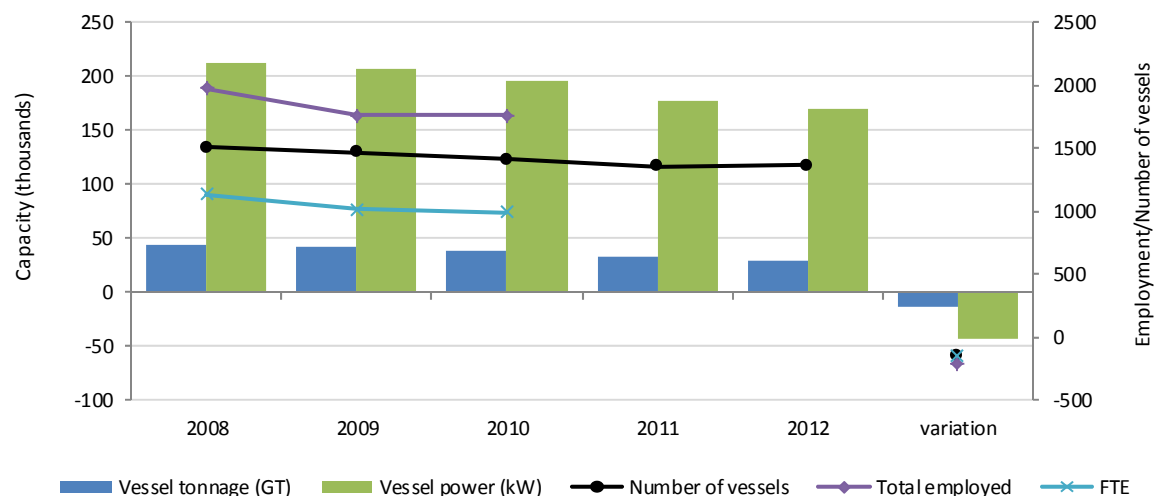


Figure 5.21.1 Swedish national fleet capacity and employment trends: 2008-2012  
(Source: EU Member States DCF data submissions)

### 5.21.2 National fleet fishing activity and output

In 2011 the Swedish fishing fleet spent a total of around 83 thousand days at sea (Table 5.21.1). The total number of days at sea has declined by around 19% between 2008 and 2011 (Fig. 5.21.2, left). The total quantity of fuel consumed in 2010 was 34 million litres, a decrease of around 18% between 2008 and 2010 (fig. 5.21.2, left).

The total volume of landings achieved by the Swedish fleet in 2011 was 173 thousand tonnes of seafood. The total volume of landings has declined between 2008 and 2011 (fig. 5.21.2, right).

A major reason for decreased landings volumes and declined values of landings during the period is decreased quotas on pelagic species.

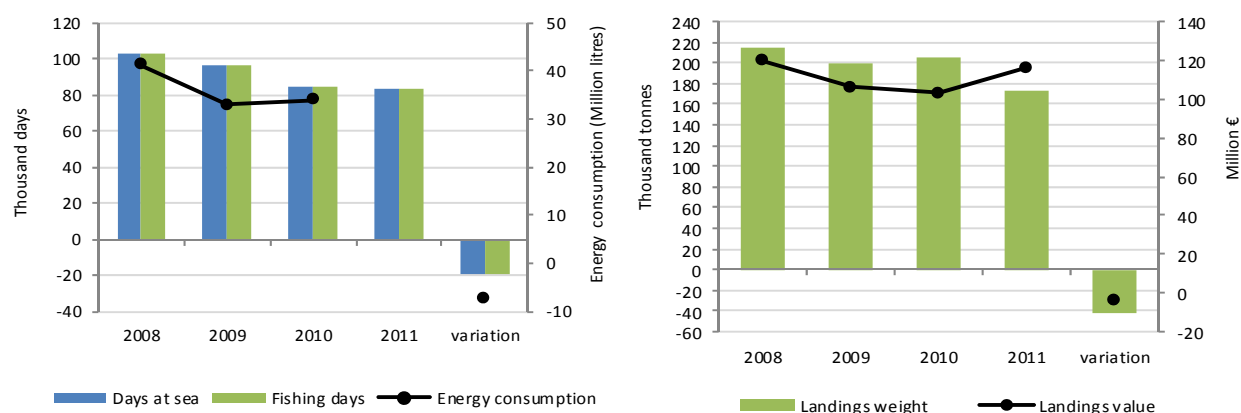


Figure 5.21.2 Swedish national fleet fishing effort (left) and landings trends (right): 2008-2011  
(Source: EU Member States DCF data submissions)



In 2011 Atlantic herring accounted for the highest value of landings (€29 million) by the national fleet, followed by Atlantic cod (€20 million), Norway prawn (€17 million) and then European sprat (€15 million) (fig. 5.21.3, top).

In terms of landings composition, in 2011 Atlantic herring was the most common species landed in terms of volume (58 thousand tonnes), followed by European sprat (56 thousand tonnes), sandeels (32 thousand tonnes), Atlantic cod (13 thousand tonnes) and Atlantic mackerel (4 thousand tonnes) (fig. 5.21.3, bottom).

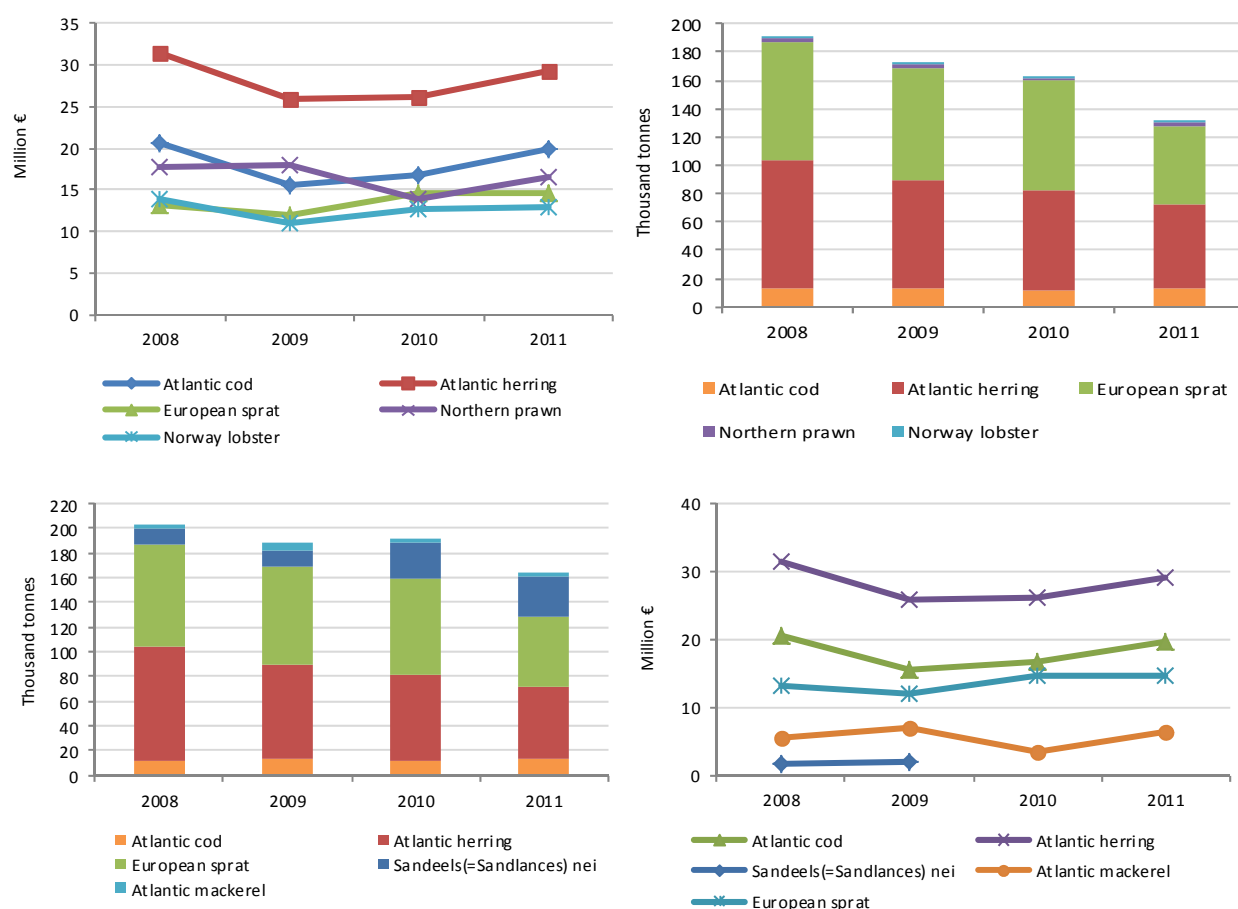


Figure 5.21.3 Swedish national fleet total landings by key species in value (top) and weight (bottom): 2008-2011. (Source: EU Member States DCF data submissions)

The prices obtained for the key value species generally declined between 2008 and 2011 (except Atlantic cod that increased in prize by 11%). In terms of prices and key species, in 2011 Norway lobster achieved the highest average price per kilo by the Swedish national fleet (€13.66 per kg), followed by Northern Prawn (€10.11 per kg) and Atlantic cod (€1.48 per kg) (fig. 5.21.4, left).

### 5.21.3 National fleet economic performance

The total amount of income generated by the Swedish national fleet in 2010 was €142 million. This consisted of €105 million in landings values, €13 million in fishing rights sales, €25 million in non-fishing income, and €0 million in direct subsidies (Table 5.21.2). The total income of the Swedish fleet increased 18 % between 2008 and 2010 (fig. 5.21.5), largely due to introduction of fishing rights.

Total expenditure by the Swedish national fleet in 2010 was €95.8 million, amounting to 62% of total income. The largest expenditure items were fuel costs (€28.2 million) and repair and maintenance (€23 million) (Table 5.21.2). Between 2008 and 2010, the total expenditure of the Swedish fleet increased by 22.7%, fluctuating between €78.1 million and €95.8 million, largely due to introduction of fishing rights.

In terms of profitability, the total amount of GVA, gross profit and net loss (excluding subsidies) generated by the Swedish national fleet in 2010 was €72,7 million, €44,7 million and -€0,9 million, respectively (Table 5.21.2; fig. 5.21.5). In 2010, the Swedish fleet had an estimated depreciated replacement value of €226,4 million, with a further €8 million investments made by the fleet.

Table 5.21.2 Swedish national fishing fleet economic performance indicators: 2008-2011.

Forecast figures for 2011 are highlighted in blue and values are also presented as a percentage of total income (shaded grey columns)

	2008	As % of total income	2009	As % of total income	2010	As % of total income	2011	As % of total income	% change (2010-08)
<b>Income (Million €)</b>									
Landings income	113.96	94.6%	106.19	86.1%	104.62	73.5%	116.36	80.9%	-8.2%
Direct subsidies	1.67	1.4%	0	0%	0	0%	0	0%	-100%
Other income	4.86	4.0%	17.11	13.9%	37.70	26.5%	27.40	19.1%	675%
Fishing rights income	0	0.0%	0	0.0%	*		6.23	4.3%	
<i>Total Income</i>	120.5	100%	123.3	100%	142.3	100%	143.8	100%	18.1%
<b>Expenditure (Million €)</b>									
Crew wages	12.07	10.0%	10.46	8.5%	13.70	9.6%	13.42	9.3%	13.5%
Unpaid labour	18.88	15.7%	14.34	11.6%	14.26	10.0%	15.89	11.1%	-24.4%
Energy costs	28.85	23.9%	24.79	20.1%	28.24	19.8%	33.23	23.1%	-2.1%
Repair costs	22.44	18.6%	23.31	18.9%	22.97	16.1%	22.59	15.7%	2.4%
Variable costs	6.13	5.1%	6.59	5.3%	8.67	6.1%	8.52	5.9%	41.4%
Non-variable costs	8.59	7.1%	9.65	7.8%	9.77	6.9%	9.37	6.5%	13.7%
Rights costs					*		6.23	4.3%	
<i>Total operating costs</i>	96.96	80.5%	89.14	72.3%	97.61	68.6%	109.25	76.0%	0.7%
Depreciation costs	40.64	33.7%	34.04	27.6%	42.43	29.8%	38.23	26.6%	4.4%
Opportunity costs of capital	n/a		1.59	1.3%	3.22	2.3%	1.60	1.1%	
<b>Performance Indicators (Million €)</b>									
Gross value added (GVA)	52.8	43.8%	59.0	47.8%	72.7	51.1%	70.1	48.7%	37.6%
Gross profit	21.9	18.2%	34.2	27.7%	44.7	31.4%	40.7	28.3%	104.4%
Net profit (incl. subsidies)	-17.1	-14.2%	-1.5	-1.2%	59.0	41.4%	56.6	39.4%	444.8%
Net profit (excl. subsidies)	-18.8	-15.6%	-1.5	-1.2%	-0.9	-0.7%	2.5	1.7%	95.0%
<b>Capital value (Million €)</b>									
Fleet depreciated replacement value	165.43	137.3%	163.27	132.4%	226.36	159.1%	194.81	136%	36.8%
Investments	10.24	8%	4.48	4%	8.20	5.8%			-19.9%
Financial position (%)	57.0		63.0		61.9				8.6%

\*Fishing rights income and costs for 2010 are included in the values for total income and total operating costs; (Source: EU Member States DCF data submissions)

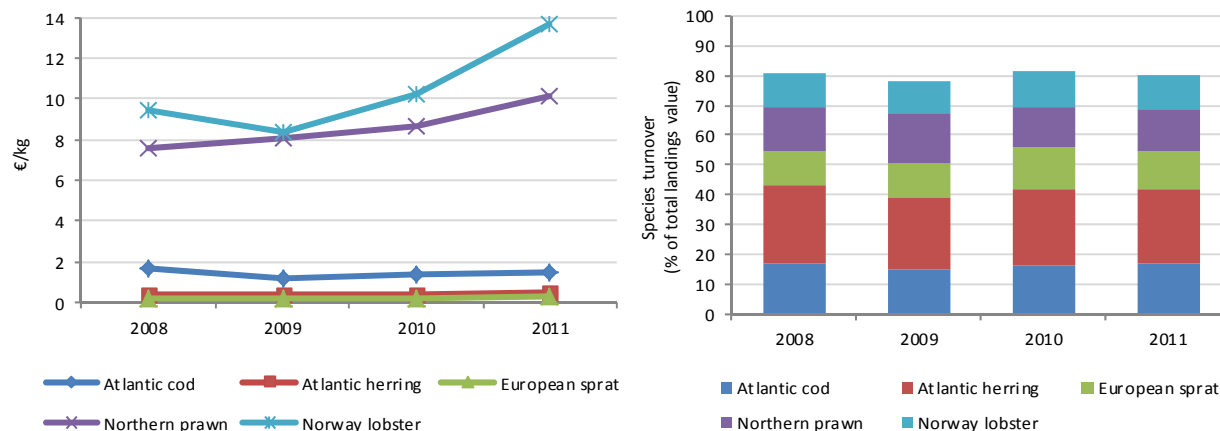


Figure 5.21.4 Total average price (left) and turnover as a percentage of total value of landings (right) for the five key species landed by the Swedish national fleet: 2008-2011  
(Source: EU Member States DCF data submissions)

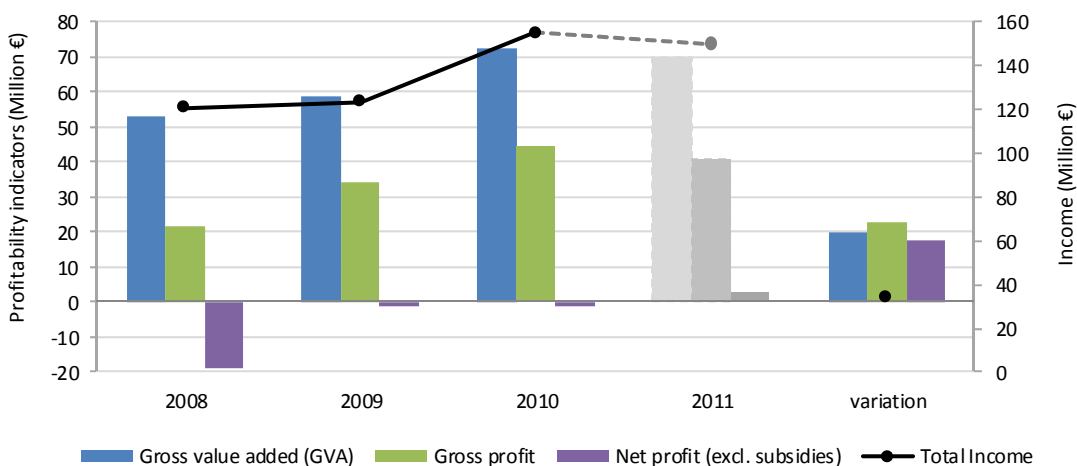


Figure 5.21.5 Swedish national fishing fleet economic performance trends: 2008-2011  
(Source: EU Member States DCF data submissions)

#### 5.21.4 Fleet composition

The Swedish national fleet consisted of 18 fleet segments in 2010. The fleet is highly diversified with a broad range of vessel types targeting different species predominantly in the Baltic Sea. Table 5.21.3 provides a breakdown of key performance indicators for all Swedish fleet segments in 2010. A short description of the most important segments in terms of total value of landings is provided below.

**Pelagic trawl over 40m** – 11 vessels make up this segment and are based predominantly in the Baltic Sea. These vessels target demersal species such as herring, mackerel and sprat. The total value of landings was around €19,5 million and around 118 FTEs were employed in this fleet segment in 2010. This fleet segment was profitable in 2010, with a GVA of €22,6 million and a net profit of over €4,1 million.

**Demersal trawl 24-40m** – 31 vessels make up this segment and are based predominantly in the Baltic Sea. These vessels target demersal species such as cod, herring and prawn. The total value of landings

was around €14,9 million and around 100 FTEs were employed in this fleet segment in 2010. This fleet segment made loss in 2010, with a positive GVA of €7,9 million but a net loss of over €1,3 million (fig. 5.21.5).

Table 5.21.3 Swedish national fishing fleet composition and key indicators at fleet segment level for 2010

Fleet Segment	Number of vessels	Vessel tonnage (GT)	Vessel power (kW)	Total employed	FTE (national)	Days at sea	Energy consumption (kilolitres)	Landings weight (tonnes)	Landings value (thousand €)	Direct Subsidies (thousand €)	GVA (thousand €)	Gross profit (thousand €)	Net profit (excl. subsidies) (thousand €)	Net Profit (incl. subsidies) (thousand €)
<b>DFN</b>														
VL1218	20	520	3539	49	24	1782	327	1172	1798	0	693	117	-340	-340
<b>DTS</b>														
VL1012	72	812	11050	103	53	3786	1461	1244	5485	0	2485	1069	-427	-427
VL1218	92	3384	22309	192	125	7847	3485	7541	13855	0	7705	4280	2067	2067
VL1824	49	5229	18454	155	127	6034	4203	15522	17087	0	9977	6460	4365	4365
VL2440	31	6581	19748	118	98	4000	6106	10799	14852	0	7861	4635	-1284	-1284
<b>PG</b>														
VL0010	625	1919	32410	749	302	45464	1838	2676	7953	0	4038	-3365	-8902	-8902
VL1012	142	1614	19101	205	82	11060	1117	2923	5025	0	2943	926	-2194	-2194
<b>TM</b>														
VL2440	12	4854	14429	76	61	2096	5739	61270	15298	0	14326	11775	5643	5643
VL40XX	12	8090	23383	119	118	2768	9720	101310	23265	0	22649	18813	4057	4057

(Source: EU Member States DCF data submissions); \*The information presented in Table 5.21.3 was changed upon request from the Swedish national expert and may not necessarily correspond to the data submitted and held in the JRC database.

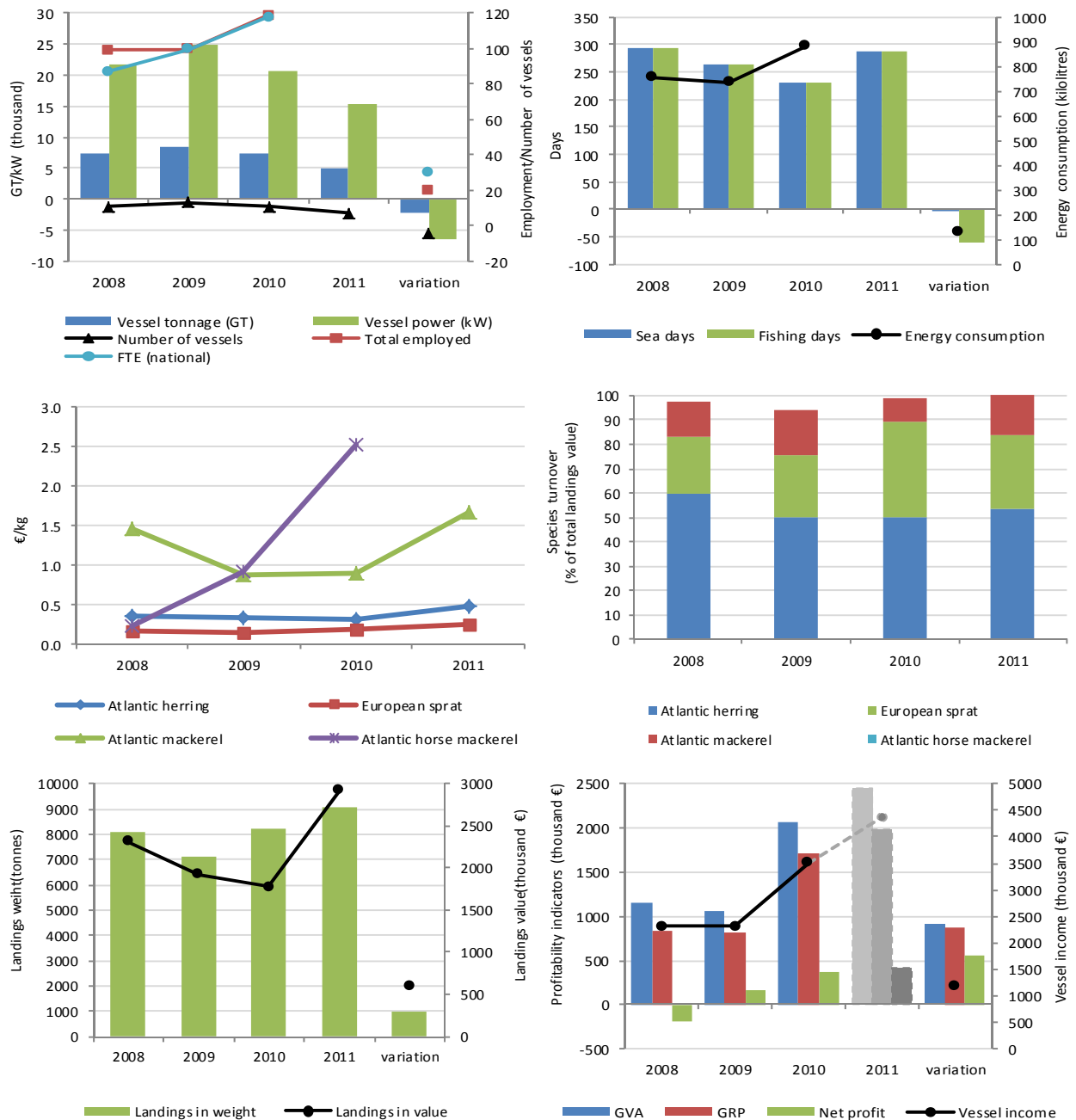


Figure 5.21.6 Key indicators for the average vessel in the Swedish TM VL40XX fleet segment, 2008-2011: top left – fleet segment capacity and employment trends; top right – fishing activity and effort; middle left – average prices (€/kg) for key species; middle right - turnover as a percentage of total value of landings for key species; bottom left - landings in value and weight; bottom right –main economic indicators for the average vessel (variation 2010-2008)

(Source: EU Member States DCF data submissions)

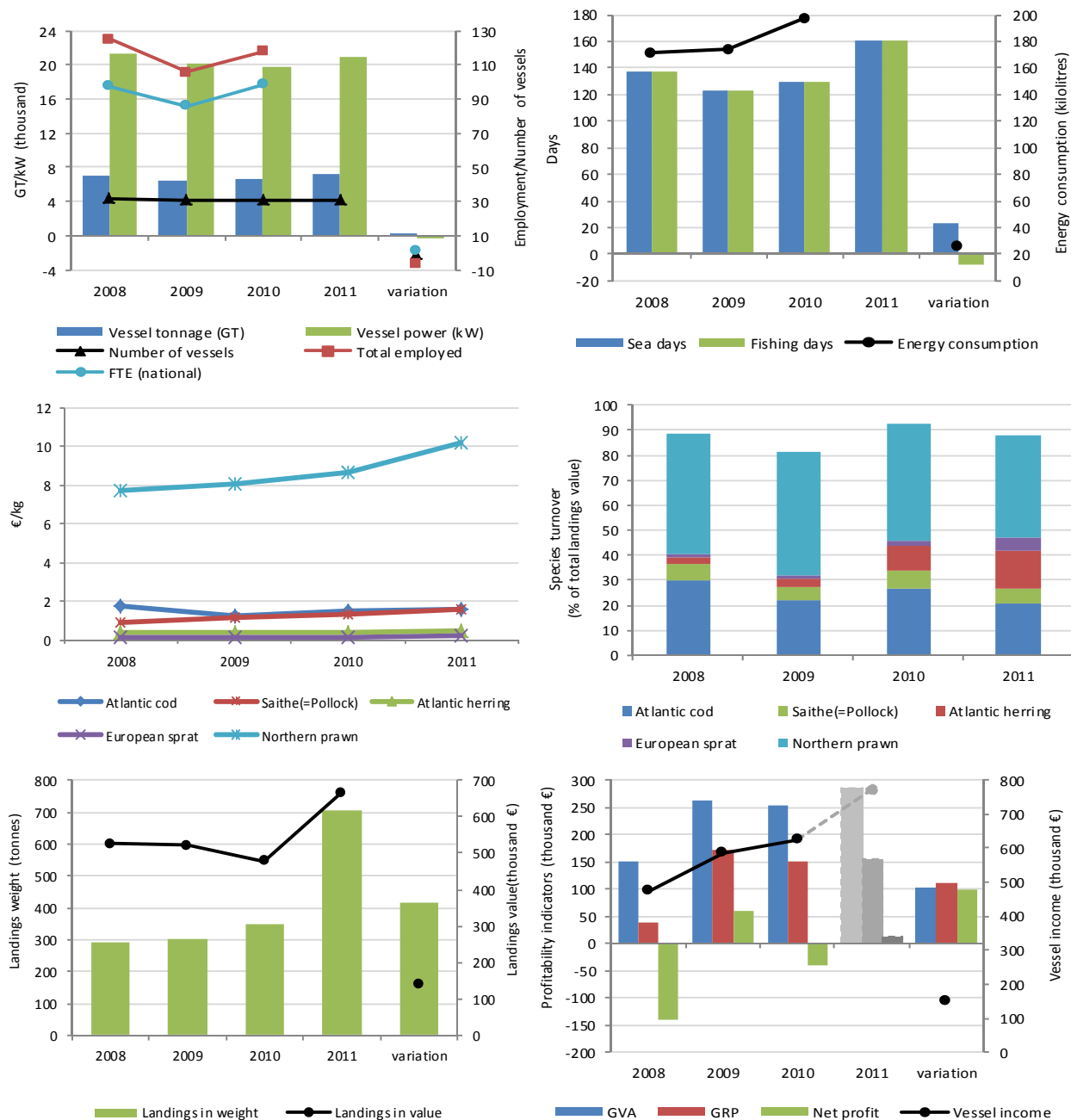


Figure 5.21.7 Key indicators for the average vessel in the Swedish DTS VL2440 fleet segment 2008-2011: top left – fleet segment capacity and employment trends; top right – fishing activity and effort; middle left – average prices (€/kg) for key species; middle right - turnover as a percentage of total value of landings for key species; bottom left - total landings in value and weight; bottom right – main economic indicators for the average vessel (variation 2010-2008)

(Source: EU Member States DCF data submissions)

### 5.21.5 Assessment for 2011 and 2012

Towards the end of 2009 Sweden introduced an ITR system for pelagic quotas. The first transactions took place in the beginning of 2010. The first effects of these transactions should have become visible in

2010 in terms of profitability for the pelagic fisheries. However decreases in quotas for pelagic species (most importantly for herring and sprat) last year may have a negative effect on the profitability of the pelagic segments. The large effect of the new system will most probably be seen in 2011 years data when capacity has been removed from the fleet.

Fuel prices increased during 2010 and 2011 and remained at high levels during the beginning of 2012, which will have an effect on all fisheries. The increase is supposed to have the greatest effect on segments fishing with active gears (e.g. trawls and seiners). In general, the fuel consumption went down during 2009 but then increased during 2010. The large demersal and pelagic vessels increased their fuel consumption in 2010. Fuel consumption by the rest of the fleet has decreased over the previous years, in part due to decreases in capacity and in part due to changes in fishing patterns and fishermen behavior. The question is however, how much further this rationalisation can occur without significant investments in new technologies and newer vessels.

The general trend since the beginning of the 2000s is a decrease in capacity, i.e. the number of vessels which is also reflected in the reduction of total engine power and gross tonnage. This is partly due to management efforts directed at decreasing fleet size in order to bring it in balance with the resources. But that is not the whole truth since a part of the decrease is due to the fact that many fishermen have left the trade since they cannot make a living from fishing anymore. There is also a recruitment problem to the fisheries since it is not an attractive way of living for younger people due to the low profitability and high entrance costs. The low recruitment is reflected in the increasing average age of the Swedish fisherman. The development with a decreasing fleet size and increasing average age is expected to continue for some time.

#### **5.21.6 Data issues**

Since 2005, the Swedish data collection is mostly based on census data mixed with a survey in order distinguish specific cost items. There are no major data issues in the Swedish part of the data collection. The main problems stem from changes in certain methodologies over time which interrupt time series mostly on the expenditure side of the economic data. One example is the issues with the estimation of capital cost. Since few, if any, new vessels have been built or even entered the Swedish fleet in recent years, reliable observations on price per capacity unit to use as input in the PIM-model is impossible to find. Sweden tries to work around this issue by estimating insurance values for each vessel from a survey. The insurance values are later used as a base for estimating the price per capacity unit used in the model. However there are issues connected with using insurance values since they may include or exclude certain values. Old wooden vessels cannot be insured and new vessels normally don't need full insurance since part of the vessel is insured by guaranties.

Another important issue is clustering. With a small and diminishing fleet Sweden is forced to cluster most of the economic data and also report cluster definitions. At the same time Sweden is recommended to report un-clustered transversal data on capacity, landings etc. The joint EU data system doesn't work (taking the cluster definitions into consideration) if a country reports un-clustered and clustered data. This means in general for most countries that they only reports clustered data and that the most clustered variable will be the variable that sets the level of detail for the whole dataset.





## 5.22 UNITED KINGDOM

### 5.22.1 National fleet structure

In 2012 the UK fishing fleet consisted of 6457 registered vessels, with a gross tonnage of 202 thousand GT and a total power of 811 thousand kW (Table 5.22.1). The size of the UK fleet decreased between 2008 and 2012. The number of vessels decreased 2.9%, total GT decreased 2.7% and total kW decreased by 3.7%. The average age of the fleet was 25 years in 2012, an increase of 3.7% compared to the average age in 2008 (fig. 5.22.1).

Table 5.22.1 UK national fishing fleet key indicators: 2008-2012

	2008	2009	2010	2011	2012	% change
<b>Capacity</b>						
Number of vessels	6601	6561	6409	6360	6457	-2.9
Average vessel age	22.8	23.2	23.7	24.6	25.1	3.7
Gross Tonnage (GT, thousand)	223.4	216.2	217.3	208.4	202.4	-2.7
Power (kW, thousand)	875.2	852.0	843.2	823.5	811.0	-3.7
<b>Effort</b>						
Days at sea (thousand)	455.9	432.0	418.5	407.9		-10.5
Fishing days (thousand)	377.3	346.9	334.3	327.0		-13.3
Energy consumption (Million litres)	294.6	296.0	n/a			0.5
<b>Employment</b>						
Total Employed	12603	11540	11494			-8.8
FTE	8163	7104	6918			-15.2
<b>Landings</b>						
Weight (thousand tonnes)	575.0	576.6	601.3	589.8		2.6
Value (Million €)	792.2	754.4	832.0	946.1		19.4

(Source: EU Member States DCF data submissions)

The total number of fishing enterprises in the UK fleet was 6105 in 2011. The vast majority of fishing enterprises, 95%, owned a single vessel and 5% of enterprises owned two to five fishing vessels. Only 2 fishing enterprises owned six or more fishing vessels. Total employment was around 11,494 jobs and 6,918 FTEs in 2010. The level of employment decreased between 2008 and 2010. The total number employed decreased by 8,8% while the number of FTEs decreased by 15,2% over the time period (Table 5.22.1; fig. 5.22.1).

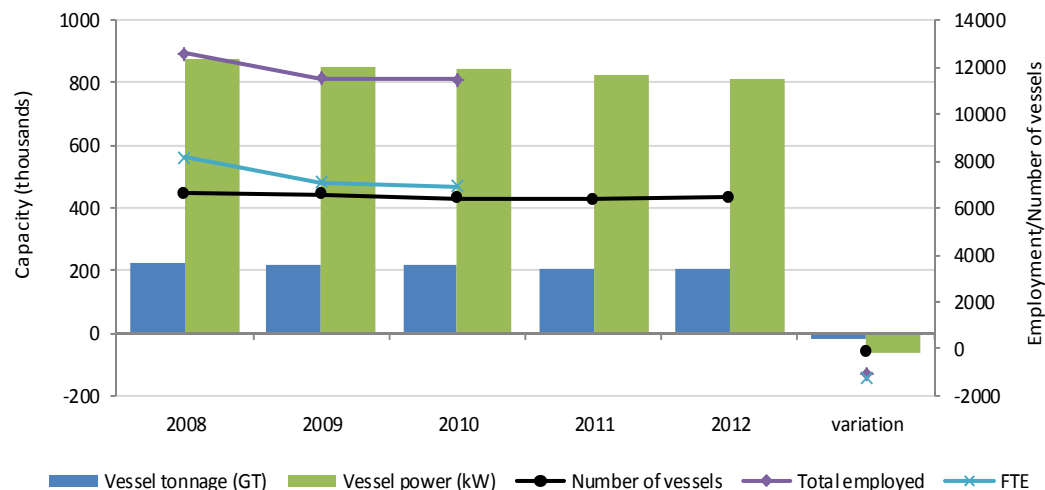


Figure 5.22.1 UK national fleet capacity and employment trends: 2008-2012  
(Source: EU Member States DCF data submissions)

### 5.22.2 National fleet fishing activity and output

In 2011 the UK fishing fleet spent a total of around 408 thousand days at sea (Table 5.22.1). The total number of days at sea in 2011 was around 10.5% lower than in 2008, with decreases each year from 2008 onwards (fig. 5.22.2, left). The total quantity of fuel consumed in 2009 was 296 million litres, a 0.5% increase on 2008 figures (fig. 5.22.2, left).

The total volume of landings achieved by the UK fleet in 2011 was around 590 thousand tonnes of seafood, a decrease of around 2% compared to 2010. The total value of seafood landed by the UK fleet in 2011 was €946 million, an increase of around 14% compared to 2010 results.

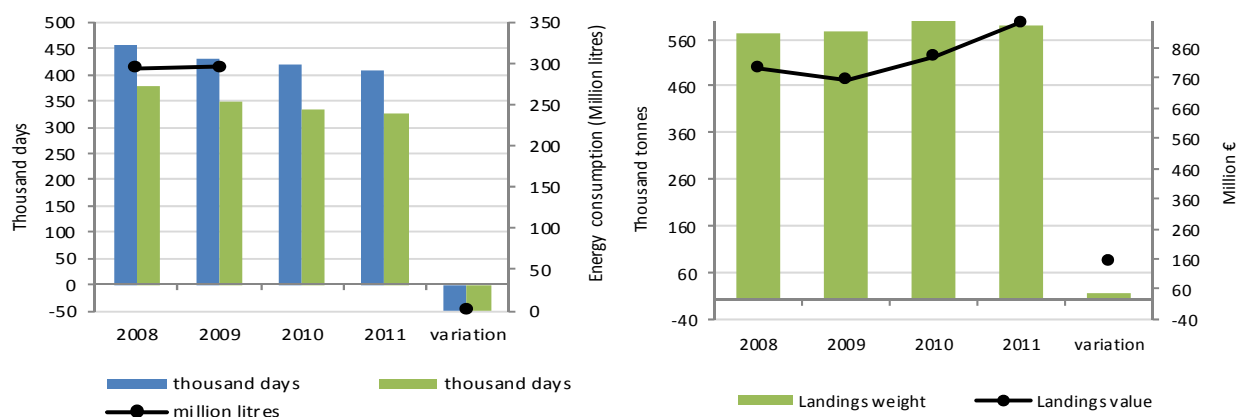


Figure 5.22.2 UK national fleet fishing effort (left) and landings trends (right): 2008-2011  
(Source: EU Member States DCF data submissions)

In terms of landings composition, in 2011 mackerel was the most common species landed in terms of volume (182 thousand tonnes), followed by Nephrops (34 thousand tonnes) and scallops (29 thousand tonnes) (fig. 5.22.3, left). In 2011 mackerel obtained the highest landed value (€237 million), again followed by Nephrops (€131 million) and then scallops (€63 million) (fig. 5.22.3, right).

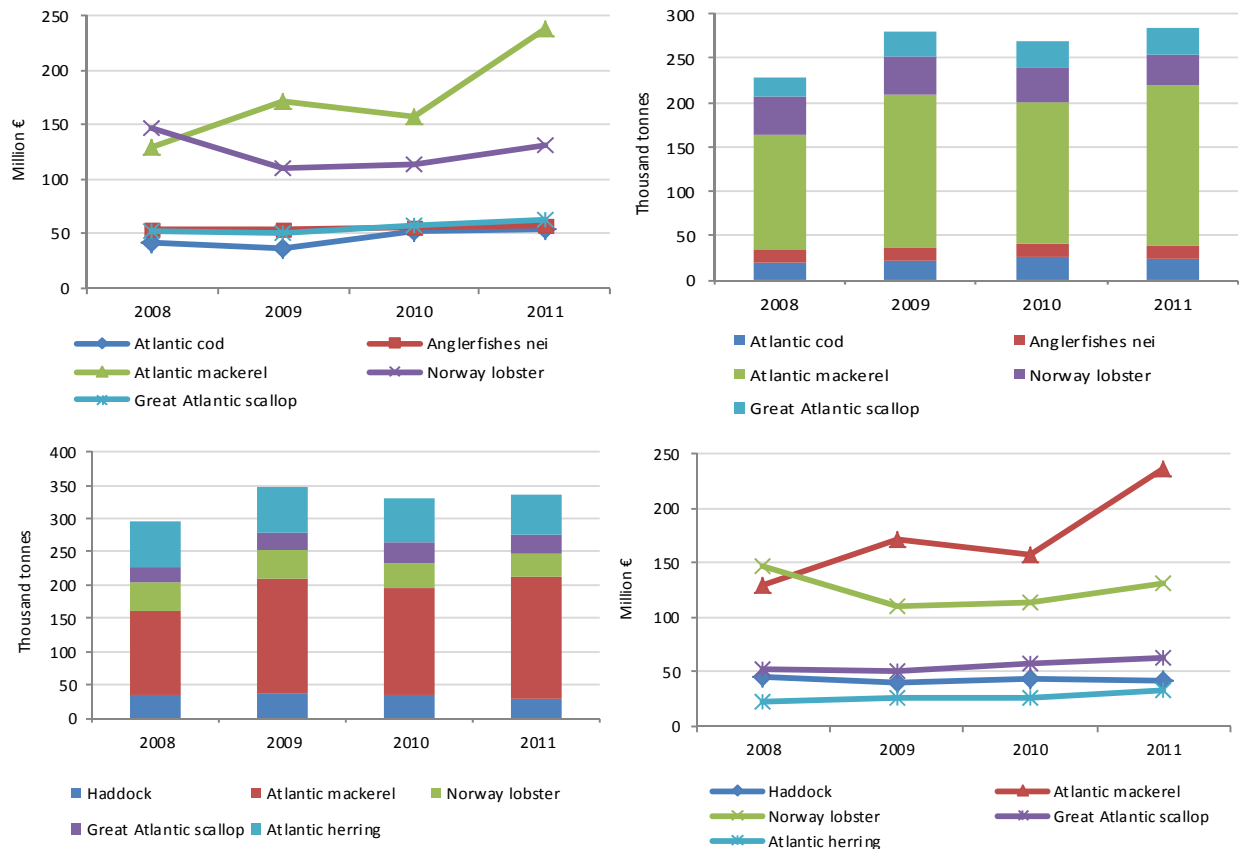


Figure 5.22.3 UK national fleet total landings by key species in value (top) and weight (bottom), with corresponding value and weights:2008-2011  
(Source: EU Member States DCF data submissions)

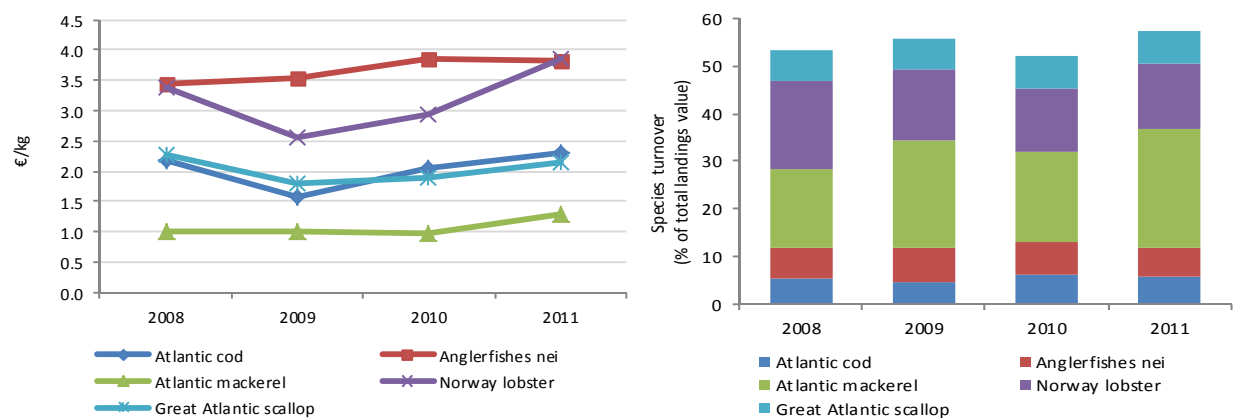


Figure 5.22.4 Total average price (left) and turnover as a percentage of total value of landings (right) for the five key species landed by the UK national fleet: 2008-2011.  
(Source: EU Member States DCF data submissions)

### 5.22.3 National fleet economic performance

The total amount of income generated by the UK national fleet in 2010 was €944 million. This consisted of €841 million from landings, €47 million in other income, €38 thousand in direct income subsidies and €17.5 in income from leasing fishing rights (Table 5.22.2). The total income of the UK fleet increased 15% between 2008 and 2010. Total operating costs of the UK national fleet in 2010 were €714 million, amounting to 76% of total income. The largest expenditure items were crew wages (€202 million) and fuel costs (€152 million) (Table 5.22.2). In 2010 the total operating costs of the UK fleet increased 13% from 2009.

In terms of profitability, the total amount of GVA, gross profit and net profit (excluding subsidies) generated by the UK national fleet in 2010 was €418 million, €200 million and €122 million, respectively (Table 5.22.2, fig. 5.22.5). The data suggests that the profitability of the UK fleet has improved in recent years; GVA, gross profits and net profits increased by 28%, 65% and 182% respectively during the period 2008-2010. The UK fleet had an estimated depreciated replacement value of €437 million and an estimated value of fishing rights of €771 million.

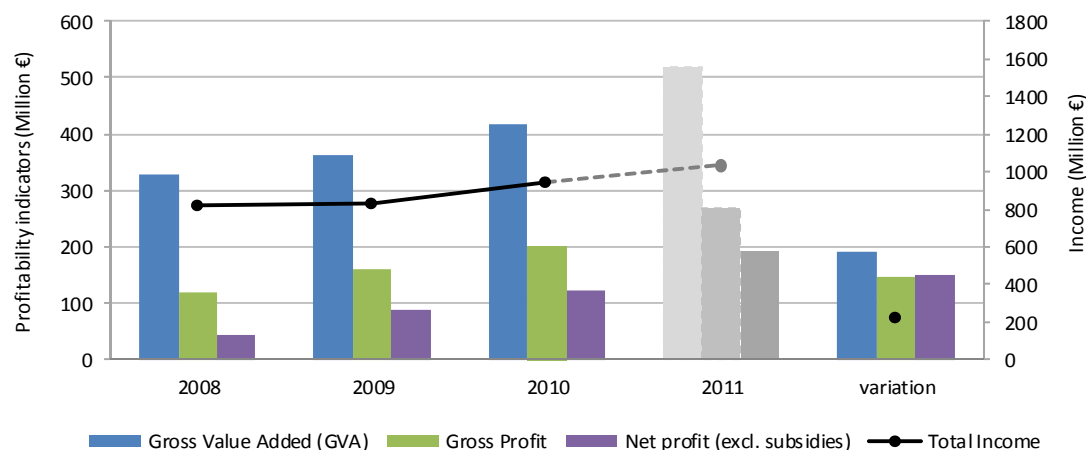


Figure 5.22.5 UK national fishing fleet economic performance trends: 2008-2011  
(Source: EU Member States DCF data submissions)

Table 5.22.2 UK national fishing fleet economic performance indicators: 2008-2011.

Forecast figures for 2011 are highlighted in blue and values are also presented as a percentage of total income (shaded grey columns)

	2008	As % of total income	2009	As % of total income	2010	As % of total income	2011	As % of total income	% change (2010-08)
<b>Income (Million €)</b>									
Landings income	733.8	89.8%	756.8	91.6%	841.34	89.1%	946.1	91.7%	14.7%
Direct subsidies	39.9	4.9%	35.9	4.3%	37.7	4.0%	36.8	3.6%	-5.5%
Other income	30.7	3.8%	22.1	2.7%	47.1	5.0%	34.6	3.4%	53.6%
Fishing rights income	12.5	1.5%	11.9	1.4%	17.5	1.9%	14.7	1.4%	40.4%
<i>Total Income</i>	816.9	100%	826.7	100%	943.8	100%	1032.3	100%	15.5%
<b>Expenditure (Million €)</b>									
Crew wages	187.4	22.9%	188.7	22.8%	202.5	21.5%	233.3	22.6%	8.1%
Unpaid labour	19.3	2.4%	11.9	1.4%	16.0	1.7%	16.7	1.6%	-16.9%
Energy costs	189.0	23.1%	155.1	18.8%	151.5	16.1%	176.7	17.1%	-19.8%
Repair costs	61.3	7.5%	89.3	10.8%	117.1	12.4%	114.1	11.1%	91.1%
Variable costs	89.6	11.0%	89.6	10.8%	71.0	7.5%	69.2	6.7%	-20.7%
Non-variable costs	97.1	11.9%	81.9	9.9%	130.2	13.8%	103.1	10.0%	34.0%
Rights costs	10.4	1.3%	13.8	1.7%	25.9	2.7%	19.9	1.9%	149.3%
<i>Total operating costs</i>	654.1	80.1%	630.3	76.2%	714.2	75.7%	733.0	71.0%	9.2%
Depreciation costs	73.9	9.0%	68.1	8.2%	77.8	8.2%	72.9	7.1%	5.3%
Opportunity costs of capital	3.7	0.5%	4.7	0.6%	0.3	0.0%	2.9	0.3%	-93.1%
<b>Performance Indicators (Million €)</b>									
Gross Value Added (GVA)	327.5	40.1%	363.0	43.9%	418.7	44.4%	606.2	58.7%	27.8%
Gross Profit	120.8	14.8%	162.4	19.6%	200.2	21.2%	356.2	34.5%	65.7%
Net profit (incl. subsidies)	83.2	10.2%	125.4	15.2%	159.9	16.9%	320.1	31.0%	92.2%
Net profit (excl. subsidies)	43.3	5.3%	89.6	10.8%	122.1	12.9%	283.3	27.4%	182.2%
<b>Capital value (Million €)</b>									
Depreciated fleet replacement value	426.3	52%	412.6	50%	437.1	46%	424.8	41%	2.5%
Investments	44.7	5%	32.6	4%	62.5	7%			39.8%
Fishing rights	709.8		832.7		771.3				8.7%

(Source: EU Member States DCF data submissions)

#### 5.22.4 Fleet composition

The UK national fleet consisted of around 40 fleet segments in 2010. The fleet is highly diversified with a broad range of vessel types targeting different species predominantly in the North Sea and North Atlantic. Table 5.22.3 provides a breakdown of key performance indicators for all UK fleet segments in 2010. A short description of the five most important segments in terms of total value of landings is provided below.

**Beam trawl 24-40m** – 27 vessels make up this segment and are based predominantly in the south west coast of England. These vessels target flatfish species such as sole and plaice. The total value of landings was around €22 million and around 227 FTEs were employed in this fleet segment in 2010. This fleet segment was unprofitable in 2010, with a GVA of €5 million and a net loss of over €14 million (fig. 5.22.6).

**Demersal trawl 24-40m** – 103 vessels make up this segment and are based predominantly in the North Sea and west of Scotland. These vessels target demersal species such as cod, haddock and monkfish. The total value of landings was around €123 million and around 740 FTEs were employed in this fleet segment in 2010. This fleet segment was profitable in 2010, with a GVA of €183 million and a net profit of just over €150 million (fig. 5.22.7).

**Purse seine over 40m** – 34 vessels make up this segment, which are based predominantly in the North West of Scotland and operate in the North Sea, West of Scotland and the Norwegian sector. These vessels target pelagic species such as mackerel and herring. The total value of landings was around €204 million and around 186 FTEs were employed in this fleet segment in 2010. This fleet segment was highly profitable in 2010, with a GVA of €110 million and a net profit of over €29 million.

**Pots and traps under 10m** – Around 1750 vessels make up this segment and are based all around the UK coastline. These vessels target a variety of shellfish species such as lobster, Norway and crab. The total value of landings was around €55 million and around 2800 fishers were employed in this fleet segment in 2010. This fleet segment was profitable in 2010, with a GVA of around €96 million and a net profit of over €60 million.

Table 5.22.3 UK national fishing fleet composition and key indicators at fleet segment level for 2010

Fleet Segment	Number of vessels	Vessel tonnage (GT)	Vessel power (kW)	Total employed	FTE (national)	Days at sea	Landings weight (tonnes)	Landings value (thousand €)	Direct Subsidies (thousand €)	GVA (thousand €)	Gross profit (thousand €)	Net profit (excl. subsidies) (thousand €)	Net Profit (incl. subsidies) (thousand €)	Clusters
<b>DFN</b>	<b>683</b>	<b>6538.72</b>	<b>46100.7</b>	<b>1256.95</b>	<b>442.71</b>	<b>34687</b>	<b>11253</b>	<b>30745</b>	<b>750</b>	<b>18945</b>	<b>7963</b>	<b>7963</b>	<b>5247</b>	
VL0010	640	2216.76	35038.1	1056.13	268.36	28227	5843	12922	368	6833	495	-1580	-1213	
VL1012	16	210.24	2075.74	42.63	27.43	1588	811	1489	57	996	580	467	525	
VL1218	13	823.49	2564.35	48.71	46.09	1991	1464	4774	106	3180	1954	1799	1904	
VL1824	5	547	1330.5			480.01	406	1429						DFN1824
VL2440	9	2741.23	5092	109.48	100.83	2401	2729	10132	219	7937	4934	4561	4780	DFN1824
<b>DRB</b>	<b>242</b>	<b>11291.61</b>	<b>49253.3</b>	<b>769.87</b>	<b>547.75</b>	<b>28099</b>	<b>45465</b>	<b>65781</b>	<b>2608</b>	<b>25365</b>	<b>11134</b>	<b>7440</b>	<b>10048</b>	
VL0010	95	638.27	7561.42	195.63	66.08	5513	2368	4572	163	3043	1285	639	802	DRB/MGP0010
VL1012	26	472.08	3905.53	78.26	61.29	3295	1985	4271	201	1509	573	357	558	DRB/MGP1012
VL1218	70	2580.53	13683.9	243.47	187.02	8809	10542	17482	728	4878	525	-488	241	
VL1824	24	2422.23	8556.42	103.1	96.02	4600.4	13488	14339	562	3991	718	-222	339	
VL2440	26	4790.5	15009	149.41	137.34	5862	13702	25118	954	11944	8032	7154	8108	DRBVL24XX
VL40XX	1	388	537			20	3380							DRBVL24XX
<b>DTS</b>	<b>944</b>	<b>84690.8</b>	<b>259581</b>	<b>3815.85</b>	<b>3301.6</b>	<b>131721</b>	<b>171814</b>	<b>348721</b>	<b>19389</b>	<b>163484</b>	<b>82643</b>	<b>59683</b>	<b>79072</b>	
VL0010	272	2611.45	28042.9	596.34	316.22	21567	5304	14543	530	9286	3476	2058	2587	
VL1012	92	1697.43	12252.3	278.96	222.1	11665	4567	10159	516	5094	2629	1924	2440	
VL1218	250	11819.7	50479.1	906.93	819.37	38078	22760	49351	2772	21455	9437	6631	9402	
VL1824	215	28952.22	81628.2	1132.29	1065.1	36758	49667	104415	6182	42700	18653	10264	16446	
VL2440	103	28370	64840.3	761.22	740.11	21086	62859	122533	7138	60433	35470	28357	35495	
VL40XX	12	11240	22337.8	140.11	138.67	2567.5	26657	47719	2252	24517	12979	10449	12701	
<b>FPO</b>	<b>2021</b>	<b>13017.16</b>	<b>140673</b>	<b>3683.58</b>	<b>1760.9</b>	<b>177550</b>	<b>45544</b>	<b>103138</b>	<b>3845</b>	<b>64649</b>	<b>27177</b>	<b>12965</b>	<b>16810</b>	
VL0010	1756	6083.35	99496.4	2790.92	1012.4	133629	20157	54857	2134	40864	15677	5333	7467	
VL1012	180	2253.76	22552.8	525.12	413.76	28545	8343	19782	536	13183	8693	7077	7613	
VL1218	72	2740.78	14043.2	282.9	253.62	11942	10473	18031	870	6684	1517	103	974	
VL1824	10	1276.27	3092.35	84.64	81.2	2621	4988	8029	304	3919	1290	452	756	FPOVL1840
VL2440	3	663	1488.38			813	1583	2439						FPOVL1840
<b>HOK</b>	<b>529</b>	<b>5389.74</b>	<b>34335.6</b>	<b>1002.43</b>	<b>292.9</b>	<b>22383</b>	<b>8620.42</b>	<b>21693.38</b>	<b>912.4978</b>	<b>12003.4</b>	<b>-659.1471</b>	<b>-1370</b>	<b>-1220</b>	
VL0010	497	1121.91	23145.5	836.41	159.22	17750	2419.3	6148.447	149.9899	2989.38	-51.77863	-473	-314	
VL1012	12	118.21	1747.9	48.63	30.54	1187	199.981	770.5616	158.705	585.154	-362.8619			HOKVL1024
VL1218	4	170.72	696			374	281.44	836.1977						HOKVL1024
VL1824	1	66	171			20	0.7429	2.99952				-636	-32	HOKVL1025
VL2440	13	3091.9	7155.23	117.39	103.14	2930	5482.23	13543.1	603.8029	8428.85	-244.5066			HOKVL24XX
VL40XX	2	821	1420			122	236.725	392.0684						HOKVL24XX

(Source: EU Member States DCF data submissions)

Table 5.22.3 Continued UK national fishing fleet composition and key indicators at fleet segment level for 2010

Fleet Segment	Fleet Segment	Number of vessels	Vessel tonnage (GT)	Vessel power (kW)	Total employed	FTE (national)	Landings weight (tonnes)	Landings value (thousand €)	Direct Subsidies (thousand €)	GVA (thousand €)	Gross profit (thousand €)	Net profit (excl. subsidies) (thousand €)	Net Profit (incl. subsidies) (thousand €)	Clusters			
MGP	16	252.26	2106.88			1982	1774.45	2235.497									
VL0010	9	68.42	812.88			611	154.817	454.3884						DRB/MGP0010			
VL1012	2	27.33	254			332	44.1919	130.9646						DRB/MGP1012			
VL1218	5	156.51	1040			1039	1575.44	1650.144									
PGP	64	179.76	3498.98			2729	585.4	1171.142									
VL0010	64	179.76	3498.98			2729	585.4	1171.142									
PMP	15	57.28	625.16			268	49.6167	153.973									
VL0010	14	48.34	562.16			266	49.5967	153.7631									
VL1012	1	8.94	63			2	0.02	0.20995									
PS	46	71411.33	160458	519.35	226.93	3840	295939	206383.8	6128.944	115362	64024.04	34265.765	40394.70925				
VL0010	5	46.49	441.9			283	145.922	156.0582						PS/TM0040			
VL1218	7	254.84	1438.8	58.6	41.05	1056	4070.74	1913.027	106.4168	-243.552	-884.215	-1217.314	-1110.89768	PS/TM0040			
VL40XX	34	71110	158578	460.75	185.88	2501	291722	204314.7	6022.528	115606	64908.26	35483.079	41505.60693	PS/TMVL40XX			
TBB	114	10958.65	39749.9	445.99	345.58	15190	20228	52089.85	4110.322	18857.9	7893.647	5053.8599	9164.18178				
VL0010	23	151.1	1510.59	45.29	5.31	572	83.779	212.6272	13.02246	152.835	96.14941	12.37473	25.39718997				
VL1012	14	236.94	1752.18	26.34	6.62	818	231.859	666.7595	82.30881	298.202	204.6384	112.78228	195.0910927				
VL1218	28	775.41	5316.61	65.73	35.87	2697	963.93	2597.028	347.556	1052.92	739.8688	-224.7989	122.7571454				
VL1824	15	1867	3532	75.12	70.91	3664	3285.28	10494.92	600.6641	4890.08	2425.811	1587.2051	2187.869142				
VL2440	27	4621.2	17413.5	233.51	226.87	5807	7819.52	22190.38	3066.771	12463.8	4427.18	3566.2967	6633.06721	TBBVL24XX			
VL40XX	7	3307	10225			1632	7843.6	15928.13						TBBVL24XX			
TM	1	128	405			15	56.8641	17.53192									
VL1824	1	128	405			15	56.8641	17.53192						PS/TM0040			
Cluster Name		Clustered fleet segments															
DFNVL1840		DFN VL1824		DFN VL2440													
DRB-MGPVL0010		DRB VL0010		MGP VL0010													
DRB-MGPVL1012		DRB VL1012		MGP VL1012													
DRBVL24XX		DRB VL2440		DRB VL40XX													
TBBVL24XX		TBB VL2440		TBB VL40XX													
PS-TMVL0040		PS VL0010		PS VL1012		PS VL1218		PS VL1824		PS VL2440		TM VL0010		TM VL1012	TM VL1218	TM VL1824	TM VL2440
PS-TMVL40XX		PS VL40XX		TM VL40XX													
HOKVL1024		HOK VL1012		HOK VL1218		HOK VL1824											
HOKVL24XX		HOK VL2440		HOK VL40XX													
FPO-PGPVL1012		FPO VL1012		PGP VL1012													
FPO-PGPVL1218		FPO VL1218		PGP VL1218													
FPOVL1840		FPO VL1824		FPO VL2440													

(Source: EU Member States DCF data submissions)



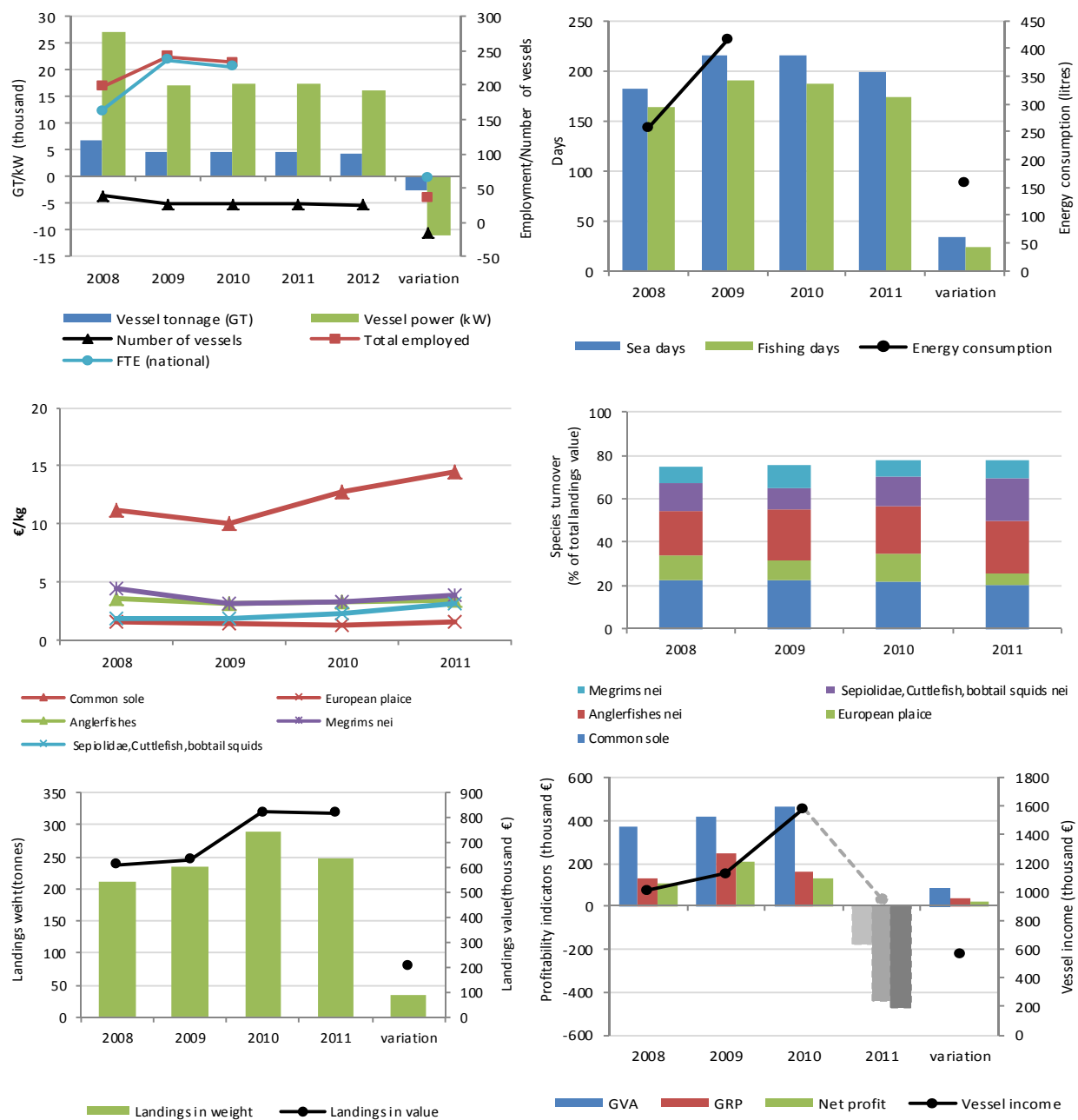


Figure 5.22.6 Key indicators for the average vessel in the UK TBB VL2440 fleet segment, 2008-2011:

top left – fleet segment capacity and employment; top right – fishing activity and effort; middle left – average prices (€/kg) for key species; middle right - turnover as a percentage of total value of landings for key species; bottom left - landings in value and weight; bottom right –main economic indicators for the average vessel (variation 2010-2008)

(Source: EU Member States DCF data submissions)

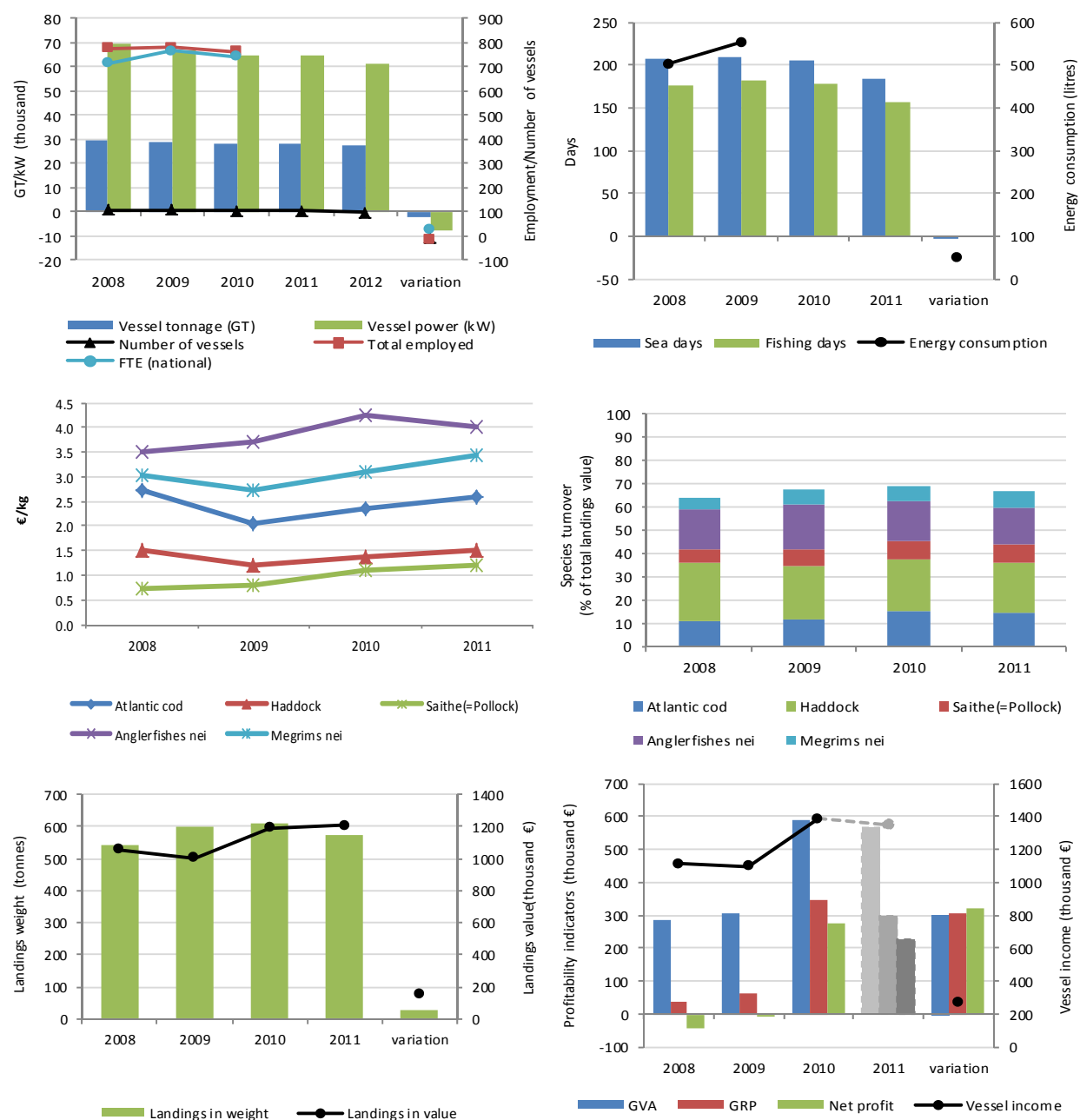


Figure 5.22.7 Key indicators for the average vessel in the UK DTS VL2440 fleet segment 2008-2011:

top left – fleet segment capacity and employment; top right – fishing activity and effort; middle left – average prices (€/kg) for key species; middle right - turnover as a percentage of total value of landings for key species; bottom left - total landings in value and weight; bottom right – main economic indicators for the average vessel (variation 2010-2008)

(Source: EU Member States DCF data submissions)

### 5.22.5 Assessment for 2011 and 2012

Western Waters effort limits for scallop dredging were exceeded in 2011 and the UK had to buy in unused effort entitlement from other MS. The effects of this limit are now effectively restricting scallop

dredging activity of UK vessels which may restrict volume and value of landings in the short term but also may protect the stocks from over-exploitation for the long term benefit. From a fleet financial and economic point of view, the way in which the available effort is allocated among the vessel owners seeking a share is a crucial question.

Fuel prices are again reaching or exceeding levels seen in 2008 and this is clearly reducing profits in the immediate term. In the longer term it acts as an incentive to develop less fuel-dependent fishing methods.

The catch quota trials for cod have eased restrictive days at sea limits for a small number of vessels in the white fish fleet in the last year or two. However for other vessels, time permitted at sea is, as intended, restricting their ability to operate and therefore restricting their ability to trade profitably in the short term. The aim of the restrictions is to enable the cod stocks to recover and secure longer term fishing opportunities but it is possible that some businesses will not survive until the effort restrictions can be eased under the terms of the recovery plan. The expectation of further effort cuts under the cod recovery plan and stated efforts among industry leaders to resist further reductions in effort is creating great uncertainty and concern about the near future among vessel owners. However, the history of attempts at effort control around the world is of continuing cuts as the short-run effect of previous cuts declines. A degree of skepticism in the industry about increases in the permitted levels of effort materialising from recovery plans is therefore understandable.

The lack of agreement over mackerel quotas for Iceland and Faroe is continuing to cause concern for the health of the stock and future fishing opportunities for UK vessels. An increase in landings volume by vessels of other countries can be expected to put downward pressure on global prices for mackerel, putting further pressure on UK pelagic vessel businesses.

Management and allocation of quota to under 10m vessels continues to be controversial in England. Pilot schemes of community-managed quota schemes are due to start. The highly-active and highly capable under 10m whitefish vessels need to be able access more fishing opportunities than the amount granted to all vessels in the under 10m pool.

#### **5.22.6 Data issues**

No major data issues



## **6. EU SEAFOOD PRICE ANALYSIS**

### **6.1 Introduction**

This chapter explores the main trends in the price of seafood products landed in the EU during the period 2008 to 2010. It examines first-sale or ex-vessel price trends at three main levels: (1) an EU overview; (2) by fishing region and (3) Member State. Each section analyses average seafood prices by key species, fishing technology and vessel length. At the EU level, the species analysed include the ten most important species in terms of landed value and volume in 2010 (Table 6.1). All landings values and prices are presented in real terms, adjusted to 2011 prices to remove effects of inflation.

Over 171,000 landing value and weight data sets for the years 2008-2010, by MS, fleet segment, vessel length and fishing area, were considered for this analysis. Several data sets were excluded from the analysis due to lack of data or inconsistencies, such as landing weights reported without corresponding landing values, or vice versa; landings data reported for inactive vessels; erroneous data; repeated observations; etc.

The total weight of EU landings used in this analysis for 2010 was 3,705 thousand tonnes of seafood products. For 2009, this value equated to 3,725 thousand tonnes. At the time of writing this report, no landings data (in volume or value) were reported for the Spanish and Greek fleets for any of the requested years. Hence, a comprehensive EU seafood price analysis was not possible.

### **6.2 Seafood Price Trends: EU Overview**

#### **6.2.1 Price Trends of Key Species**

This analysis was carried out for the ten most important species in terms of value and weight landed in 2010. Of note, however, is that landings data on 896 (FAO code) species were recorded under DCF by MS in the EU during the period 2008-2010. Reported landings by species varied over the time period analysed, with 605 FAO code species recorded in 2008, 633 in 2009 and 598 in 2010.

Table 6.1 presents the top ten species in terms of landed value and weight for the year 2010, highlighting the species group and its relevance to the analysis. The key species in terms of value belonged in most part to either the crustacean or demersal groups while in terms of weight, small pelagics predominated (Table 6.1).

Table 6.1 Common name, scientific name and FAO code and main species group of the key species analysed.

Common name	Scientific name	FAO code	Species group	Analysis
Norway lobster	Nephrops norvegicus	NEP	Crustacean	value
Common sole	Solea solea	SOL	Demersal	value
Atlantic mackerel	Scomber scombrus	MAC	Small pelagics	value/weight
Atlantic cod	Gadus morhua	COD	Demersal	value/weight
Atlantic herring	Clupea harengus	HER	Small pelagics	value/weight
European hake	Merluccius merluccius	HKE	Demersal	value
Great Atlantic scallop	Pecten maximus	SCE	Molluscs	weight
European plaice	Pleuronectes platessa	PLE	Demersal	value/weight
Common shrimp	Crangon crangon	CSH	Crustacean	value
Common cuttlefish	Sepia officinalis	CTC	Molluscs	value
European sprat	Sprattus sprattus	SPR	Small pelagics	weight
Sandeels(=Sandlances)	Ammodytes spp	SAN	Demersal	value
Jack and horse mackerels	Trachurus spp	JAX	Small pelagics	weight
European pilchard(=Sardine)	Sardina pilchardus	PIL	Small pelagics	weight
Round sardinella	Sardinella aurita	SAA	Small pelagics	value
Boarfishes nei	Capros aper	BOR	Demersal	weight

Figure 6.1 shows the total landings in value and weight of the key species analysed. In terms of value landed in 2010, Norway lobster ranked first, closely followed by common sole and Atlantic mackerel. This trends has maintained over the period analysed apart from common sole overtaking Norway lobster in 2009. Landing values of Atlantic cod, Atlantic herring and European hake have also maintained their positions in the top five (fig. 6.1 top).

The landings value of Norway lobster decreased by almost 23% in 2009, followed by an increase of 4% in 2010. Landings in weight decreased by 2% in 2009 and further 8% in 2010. The landed value of common shrimp fell 32% in 2009 whereas landings in weight increased by only 3%. On the other hand, the landed value of lower value species, such as Atlantic mackerel, increased with a corresponding increase in weight landed, both in 2009 and 2010.

Overall, in 2009 a decrease in the total landed value of most species was observed except for Atlantic mackerel, common sole and common cuttlefish when compared to 2008 values. In 2010, the landings value of most of the species analysed recovered (fig. 6.1 top).

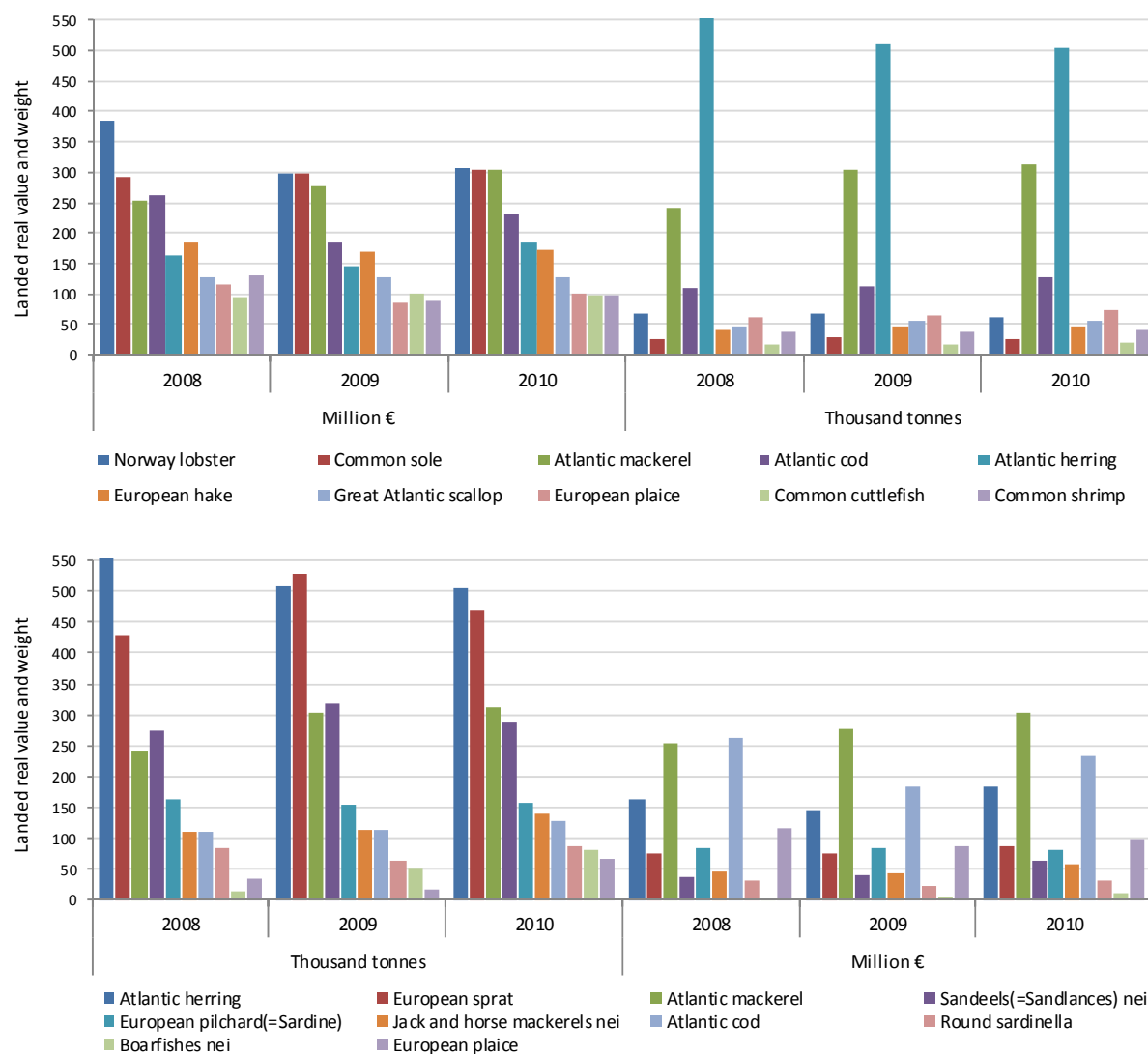


Figure 6.1 Top 10 species in terms of landings value (top) and weight (bottom), and their corresponding weights and values: 2008-2010.

(Source: EU Member States DCF data submissions)

In terms of weight landed, Atlantic herring ranked first in 2010, followed by European sprat, which ranked first in 2009. Atlantic mackerel, sandeels, sardine and mackerel also maintained their positions in the top five throughout the period analysed (fig. 6.1, top).

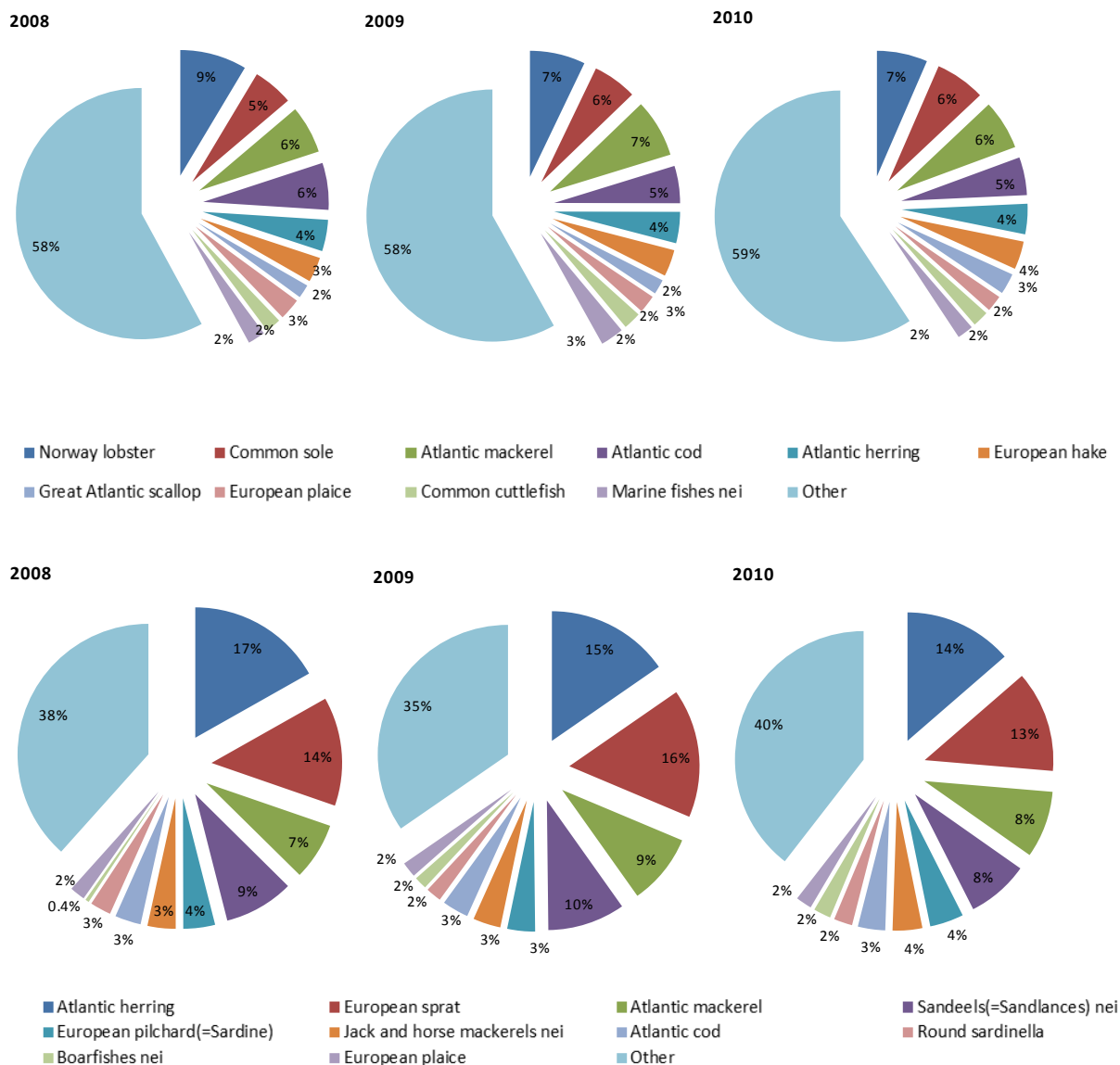


Figure 6.2 Top 10 species as percentage share of total landings in value (top) and weight (bottom): 2008 – 2010  
(Source: EU Member States DCF data submissions)

In terms of value landed, the average first-sale price of most of the species analysed was generally higher in 2010, compared to 2009 (fig. 6.3, left). The same tendency was observed for the average first-sale price of most of the species analysed in terms of weight landed (fig. 6.3, right).

Landings in weight of Atlantic herring decreased in 2009 by 8,4%, with a corresponding 11,4% decrease in landed value. However, the value of landings increased by 26,9% in 2010 with only a small decrease in weight (0,8%). On the other hand, the 14% increase in the value of European sprat landings may be a result of the 11% decrease in weight landed in 2010 (fig. 6.1, bottom).

These top ten species represented almost 40,7% in value and 60,5% in weight of the total landings reported by EU Member States in 2010 (fig. 6.2). The importance of the species analysed in terms of



value has decreased slightly over the time series (fig.6.2, top) while the key species in terms of weight landed has changed somewhat over the years, reaching 65% of the total landings in the EU in 2009.

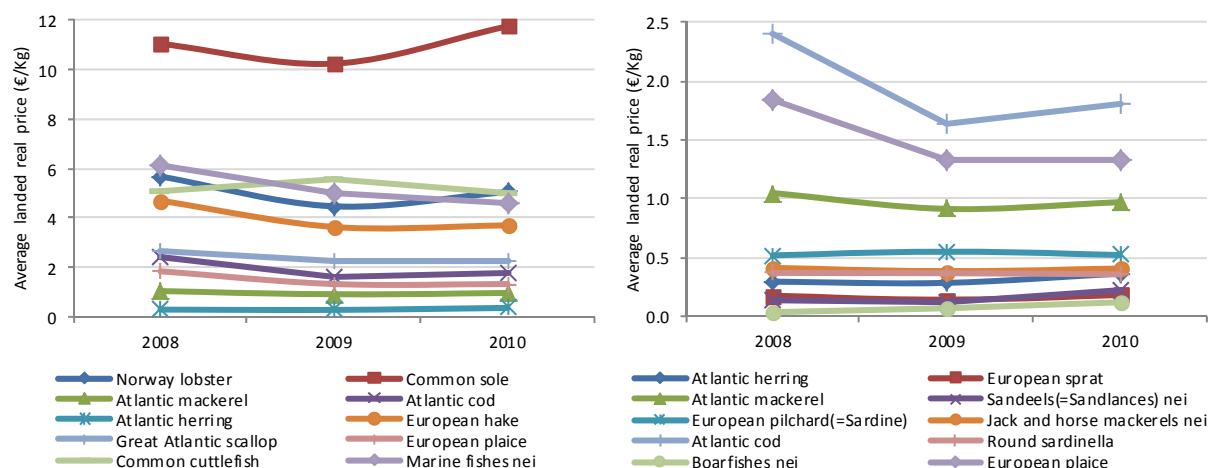


Figure 6.3 Average real price of top 10 species in terms of landings value (left) and weight (right) 2008-2010  
(Source: EU Member States DCF data submissions)

Figure 6.4 shows the top eight species in terms of the highest average first-sale price and other key species landed in the EU over the period analysed. The majority of species that fetched the highest average price in the EU were crustaceans (lobster and prawns). The general trends in average prices was also observed for these high value species, with all species suffering a significant decrease in landed price (on average around 16%), apart from the blue and red shrimp which increased 2% in 2009.

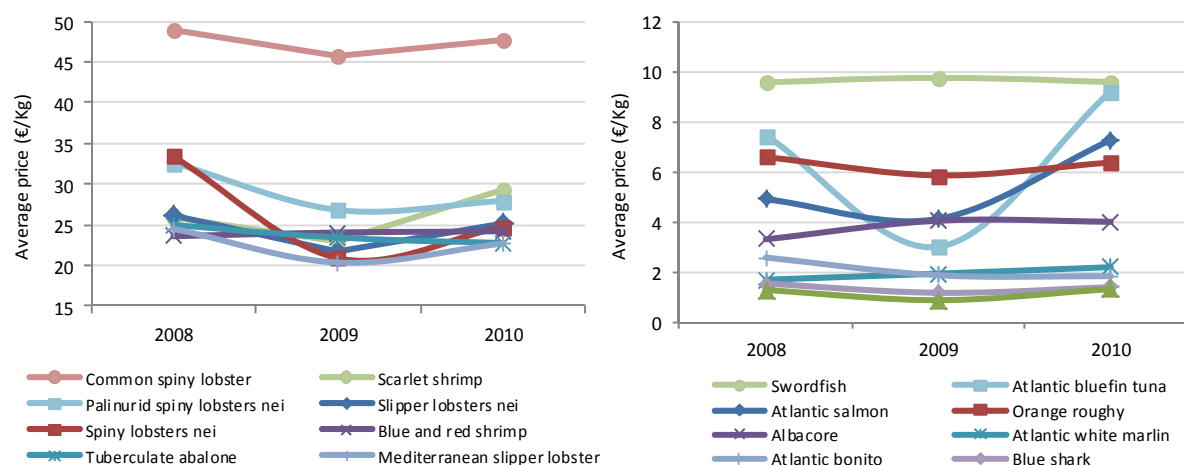


Figure 6.4 Top ten species in terms of first-sale price (left) and other key species (right): 2008-2010  
(Source: EU Member States DCF data submissions)

## 6.2.2 Price Trends by Main Species Group

According to the 2012 DCF data submitted by Member States, fish constituted around 90% in weight and 77% in value of the total EU marine production in 2010.

In terms of total value landed, demersal species represented 34% of total landings in 2010, followed by small pelagics with 23%, crustaceans with 16%, molluscs with 10% and other fishes with 7% (tuna and swordfish represented around 6%, deep-water fish species 2% and sharks and rays 1% of total landings in 2010).

In terms of total weight landed, small pelagics represented 53% of total landings, followed by demersal species with 22%, other fishes with 8% and crustacean with 5% (molluscs represented 4.5%, tuna and swordfish 3%, deep-water fish species 3% and sharks and rays 1% of total landed weight in 2010). These trends have remained relatively stable over the period analysed (fig. 6.5).

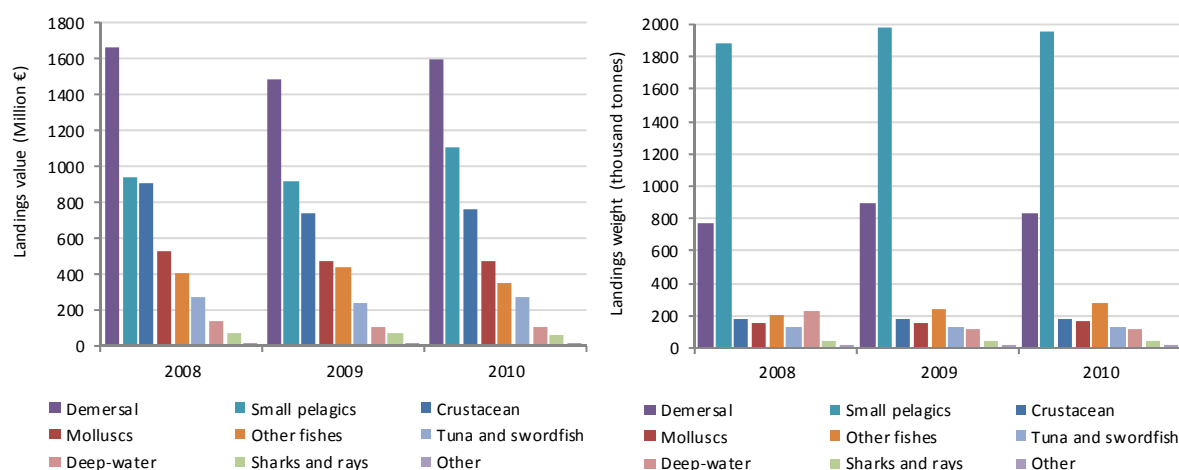


Figure 6.5 Total landings in value and weight by main species groups: 2008-2010.  
(Source: EU Member States DCF data submissions)

Figure 6.6 shows the average price trends by main species groups between 2008 and 2010. Average ex-vessel price levels follow different trends depending on the different species groups.

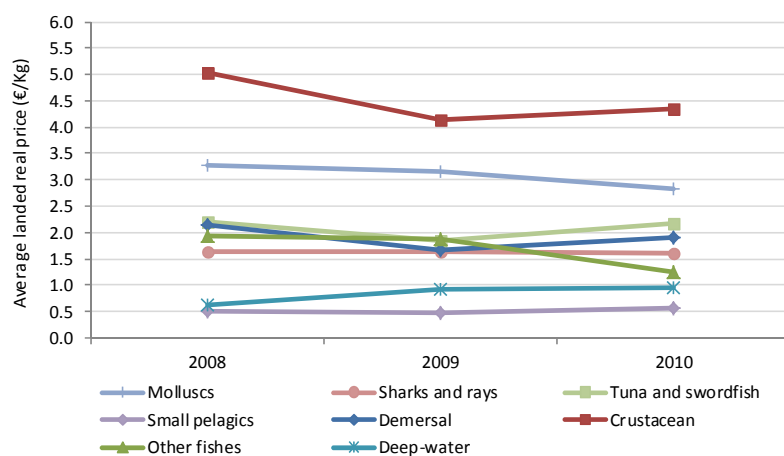


Figure 6.6 Average landing real price by main species groups: 2008-2011.  
(Source: EU Member States DCF data submissions)

### 6.2.3 Price Trends by Fishing Gear

Asche & Guillen (2012) showed that fishing gear and origin play an important role in the price formation of seafood products. Increasingly, fishing gear and origin are becoming quality attributes for different fish stocks, influencing the price determination process. Traditionally, fishing gear has been important mainly because it was perceived to influence product quality (Kristofersson & Rickertsen, 2004; McConnell & Strand, 2000), but it has progressively become more relevant due to its perceived environmental impacts. The average landed price of all species was analysed by fishing technology. Figure 6.7 analyses seafood price trends by main type of fishing gear, as either mobile, passive or mixed gears.

The mobile gears include the following gear types: Beam trawl (TBB); Demersal trawl and Demersal seiner (DTS); Pelagic trawl and seiner (PTS); Dredges (DRB); Polyvalent mobile gears (MGP); Other mobile gears (MGO); Purse seiners (PS) and Pelagic trawlers (TM). The passive gear group include: Passive gears for vessels smaller than 12 meters (PG); Gears using hooks (HOK); Drift nets and fixed nets (DFN); Pots and traps (FPO); Polyvalent passive gears (PGP); Other passive gears (PGO).

The mixed gear group includes vessels using both passive and active gears: Combining mobile and passive gears (PMP). Figure 6.7 shows that the passive gear segments obtain higher prices than the mobile gear segments, which may be due to the fact that passive gears are generally used by vessels targeting high value species.

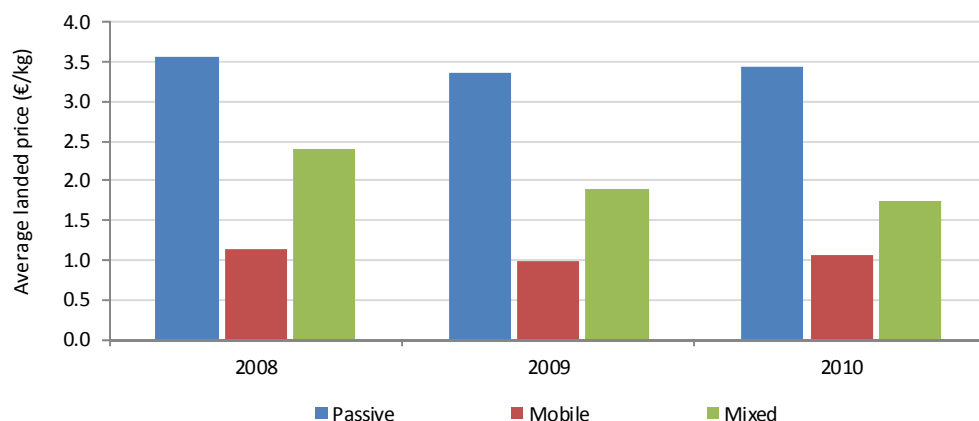


Figure 6.7 Average real landed price (€/Kg) by main fishing gear: 2008-2010.  
(Source: EU Member States DCF data submissions)

Observation of average prices for each fleet segment shows that vessels using passive gears reach the highest average price in 2010: 5,95€/kg for PGP, 3,67€/kg for HOK and 3,53€/kg for DFN (7,52 €/kg however for MGO in 2010).

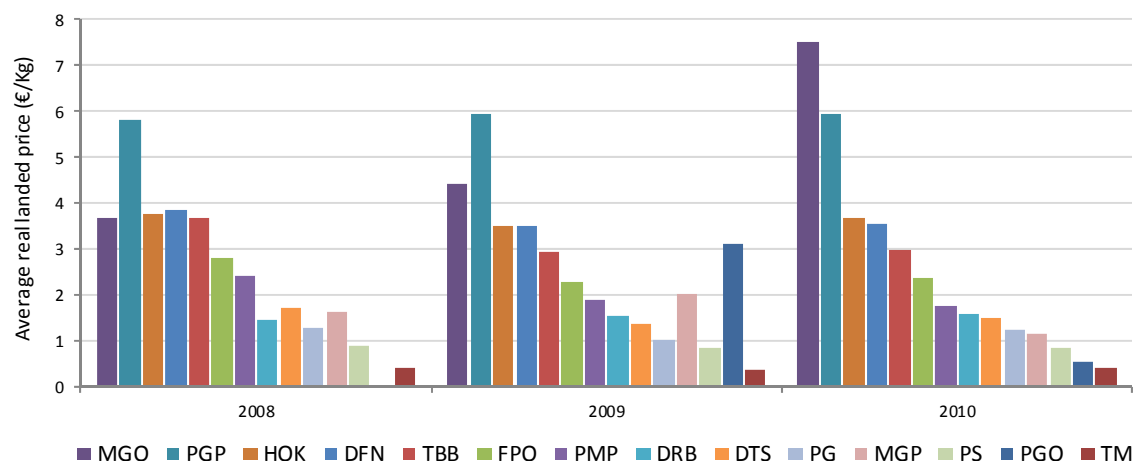


Figure 6.8 Average real landed price by fishing gear: 2008-2010  
(Source: EU Member States DCF data submissions)

#### 6.2.4 Price Trends by Vessel Length

The price of all the species landed in the EU was also analysed by vessel length, according to the main vessel length segments used in the DCF: (1) VL0006 : contains vessels less than 6 metres in length; (2) VL0612: contains vessels between 6 and 12 metres in length; (3) VL0010: contains vessels less than 10 metres in length; (4) VL1012: contains vessels between 10 and 12 metres in length; (5) VL1218: contains vessels between 12 and 18 metres in length; (6) VL1824: contains vessels between 18 and 24 metres in length; (7) VL2440: contains vessels between 24 and 40 metres in length; (8) VL40XX: contains vessels greater than 40 metres in length.

Figure 6.9 shows the seafood price trend by vessel length for the years 2008 to 2010. Results show that average prices decrease as the length class increases. Smaller vessels are usually able to market their catch the same day it is caught, offering a fresher product. Furthermore, smaller vessels often adopt fishing methods which allow for them to target higher value species, such as creels, pots, traps and lines.

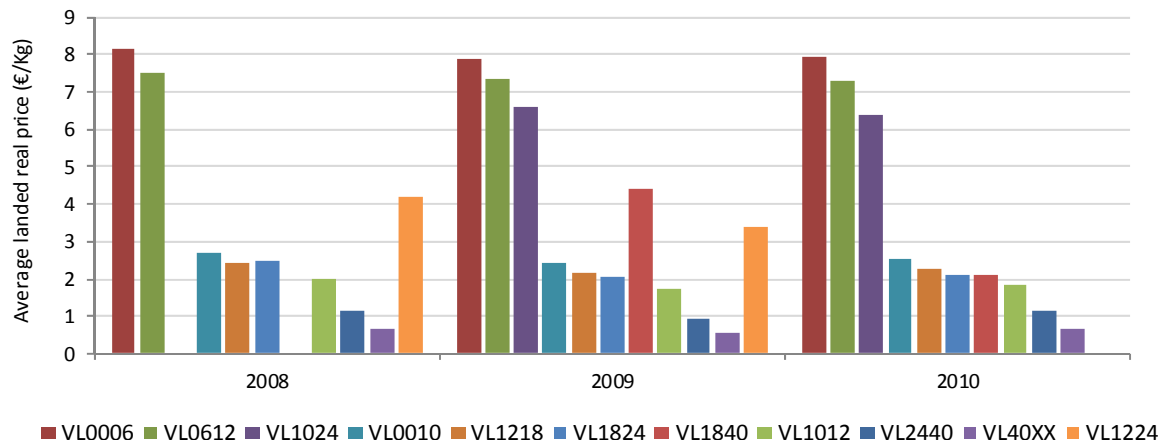


Figure 6.9 Average real landed price by vessel length 2008-2010  
(Source: EU Member States DCF data submissions)

### 6.3 Regional Price Trends

The regional analysis was carried out according to the Commission Regulation (EC) No 665/2008 of 14 July 2008 that establishes the following regions for the collection, management and use of data in the fisheries sector and support for scientific advice regarding the Common Fisheries Policy:

- 1) Baltic Sea (ICES areas III b-d),
- 2) Mediterranean Sea and Black Sea,
- 3) North Sea (ICES areas IIIa, IV and VIId) and the Eastern Arctic (ICES areas I and II),
- 4) North Atlantic (ICES areas V-XIV and NAFO areas),
- 5) Other fishing regions (comprises all other fishing grounds).

The landing price by fishing regions reflects the species catches on specific area corresponding to stocks composition, characteristics of the markets addressing too, as well as to the fleets' segmentation.

Figure 6.10 contains the fish price trends by fishing region. The highest level is registered in the Mediterranean and Black Sea with a level around 4,80 €/kg in 2010. The price level shows the following ranking schedule: North Atlantic – 1,41 €/kg, North Sea – 1,10 €/kg, Other region – 0,82 €/kg and Baltic Sea – 0,34 Euro/kg, as it is shown in Figure 6.10.

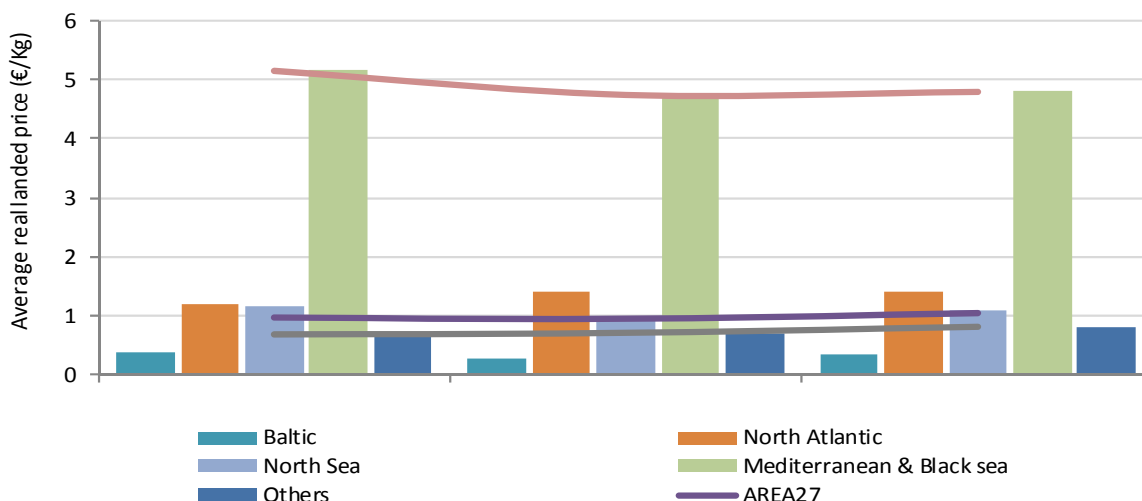


Figure 6.10 Average landed real price by region: 2008-2010

(Source: EU Member States DCF data submissions)

### 6.3.5 Price Trends of Top 5 species by Region

Figure 6.11 examines the average price trends of the top 5 species in terms of total landings value in each region.

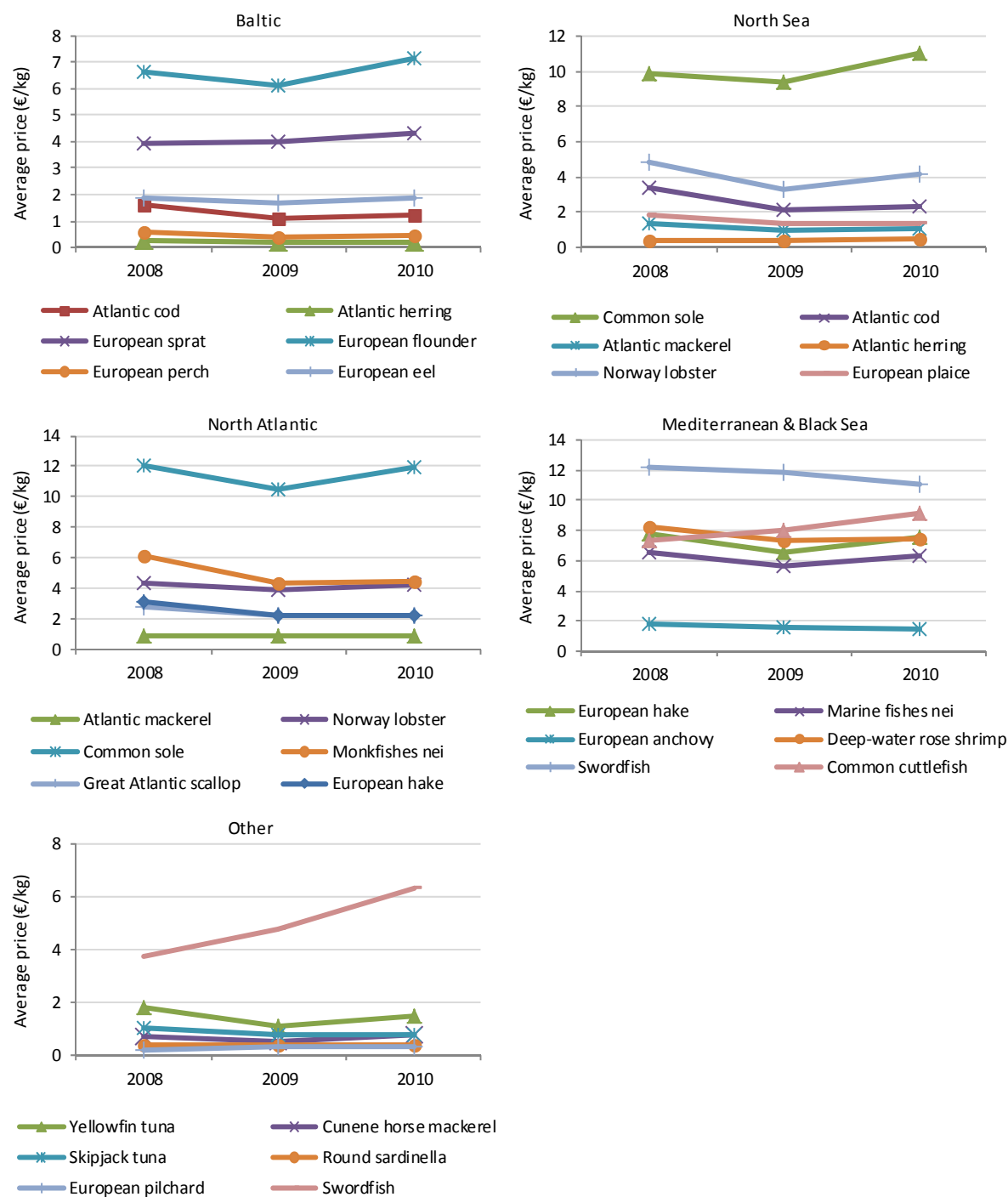


Figure 6.11 Average landed price of the top 5 species in terms of landed value by fishing region: 2008-2010  
(Source: EU Member States DCF data submissions)

### 6.3.6 Regional Price Trends by Fishing gear

Figure 6.12 shows the average price levels attained by fleet segments in each region. The fishing technique and target species are two explanations for the observed differences in average prices.

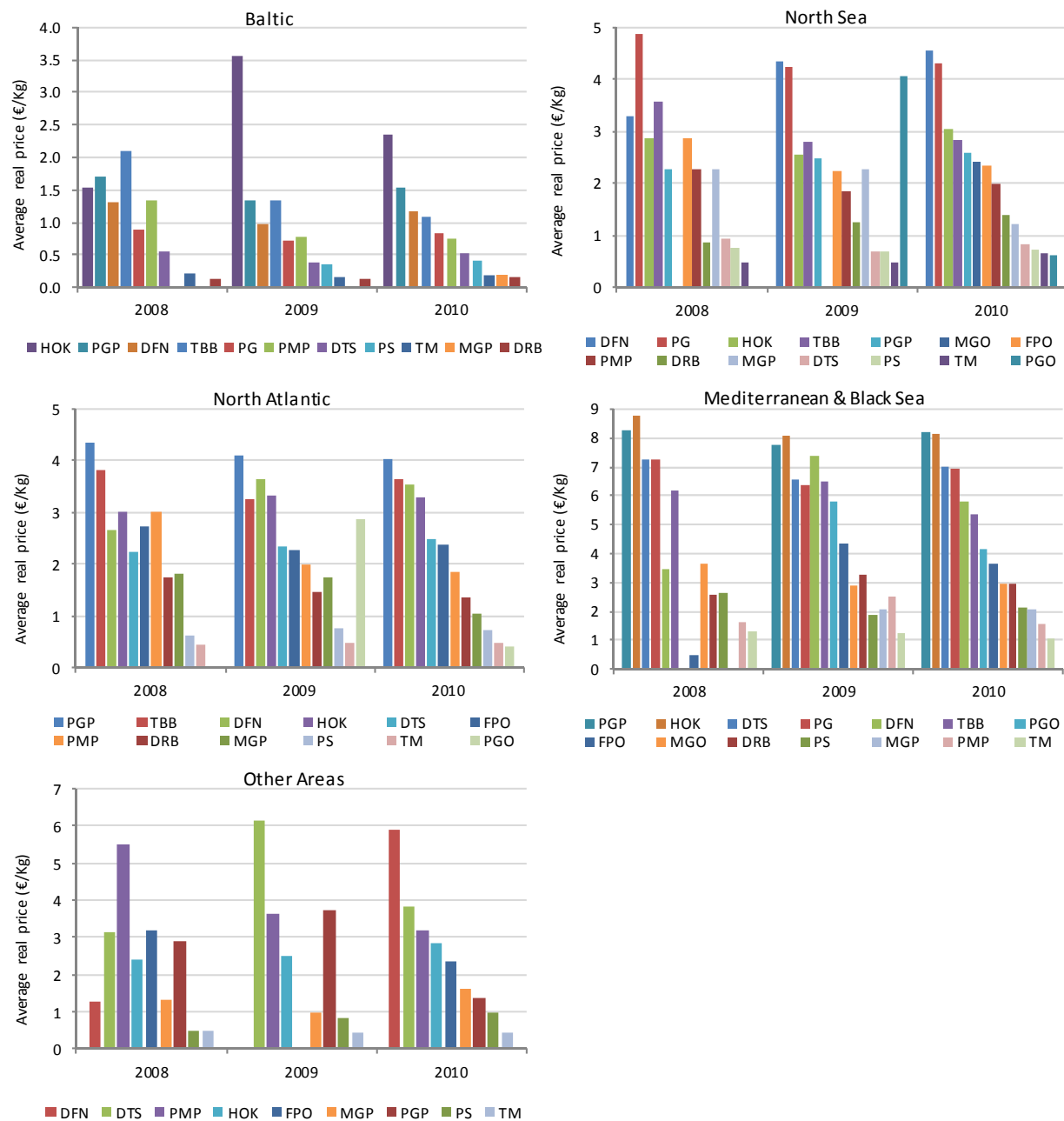


Figure 6.12 Average landed real price by region and fishing gear (main gear type): 2008-2010  
(Source: EU Member States DCF data submissions)

### 6.3.7 Regional Price Trends by Vessel Length

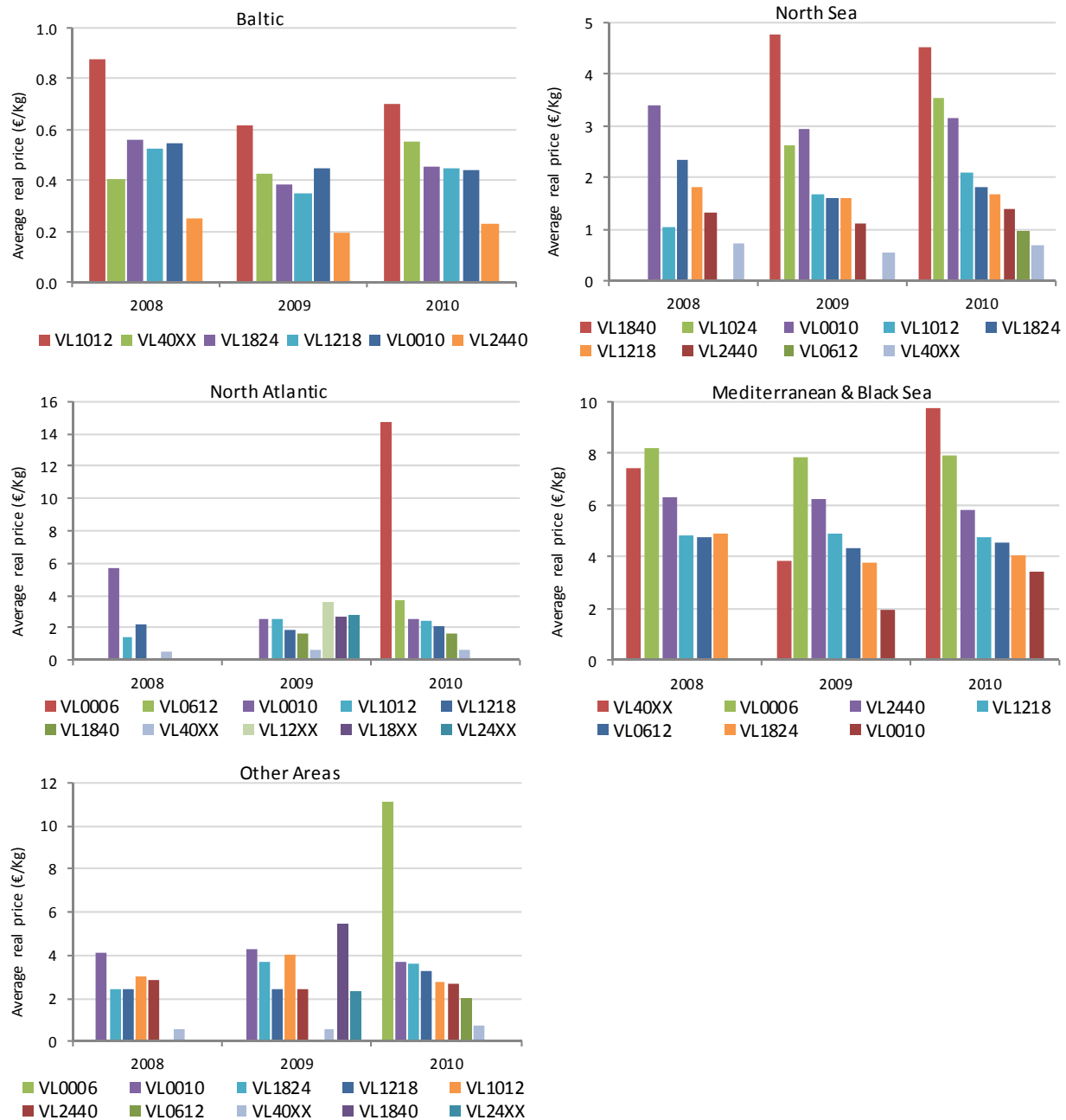


Figure 6.13 Average landed real price by region and vessel length: 2008-2010  
(Source: EU Member States DCF data submissions)



## 6.4 Price Trends by Member State

Figure 6.14 shows the average landed price of seafood in the EU by Member State for the years 2008 to 2010. Cyprus obtained the highest landings price for the years analysed, with the average price increasing from €7,15 in 2008 to €7,60 per kilo of seafood landed in 2010. The average price of all species in the European Union in 2010 reached €1,28 per kilo (+6,3% compared to 2009).

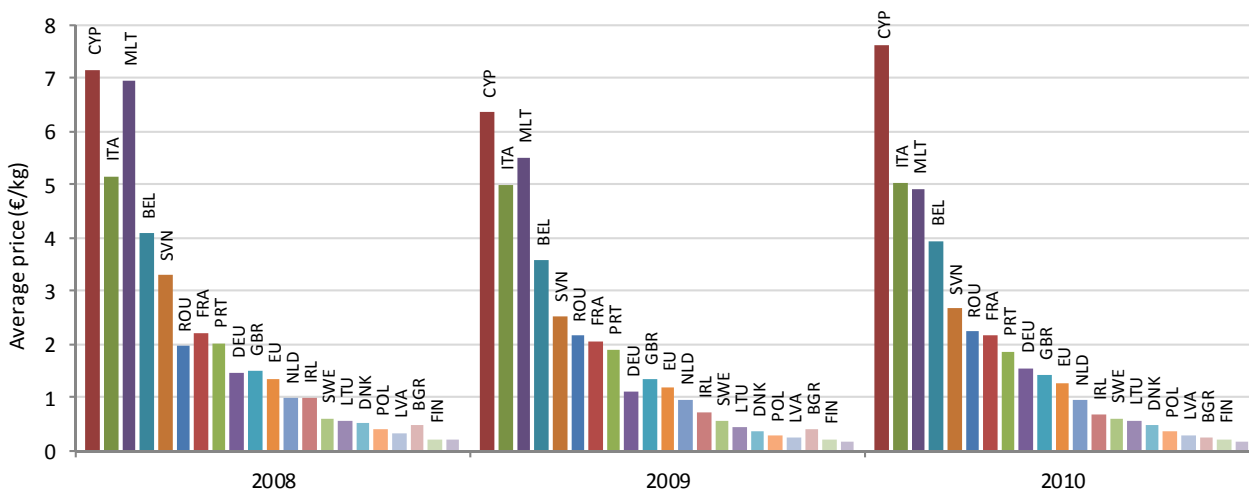


Figure 6.14 Average landed real price by Member States: 2008 – 2010

(Source: EU Member States DCF data submissions)

### 6.4.8 Price Trends of Top 5 species by Member State

Figure 6.15 examines the average price trends of the top 5 species in terms of total landings value by Member State.

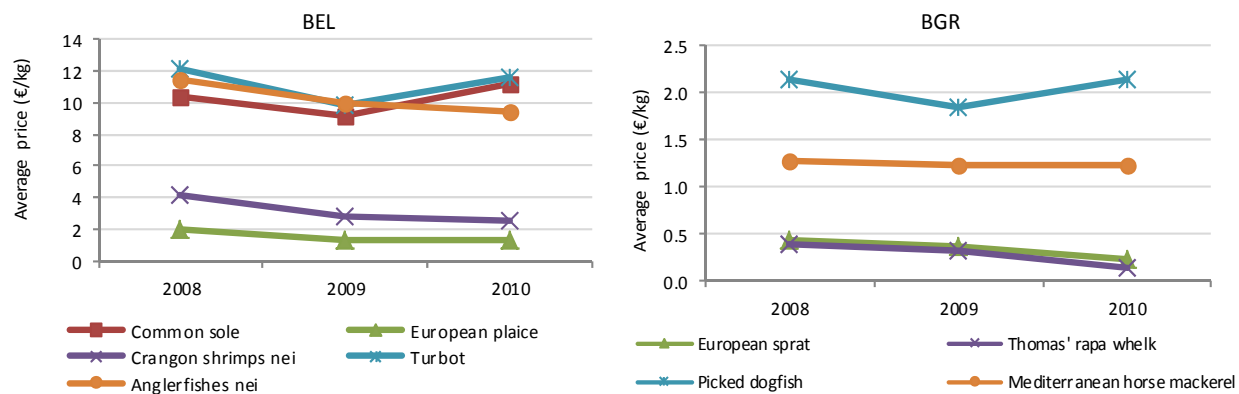


Figure 6.15 Average price trends (€/kg) of the top 5 species in terms of total landings value by Member State.

(Source: EU Member States DCF data submissions)

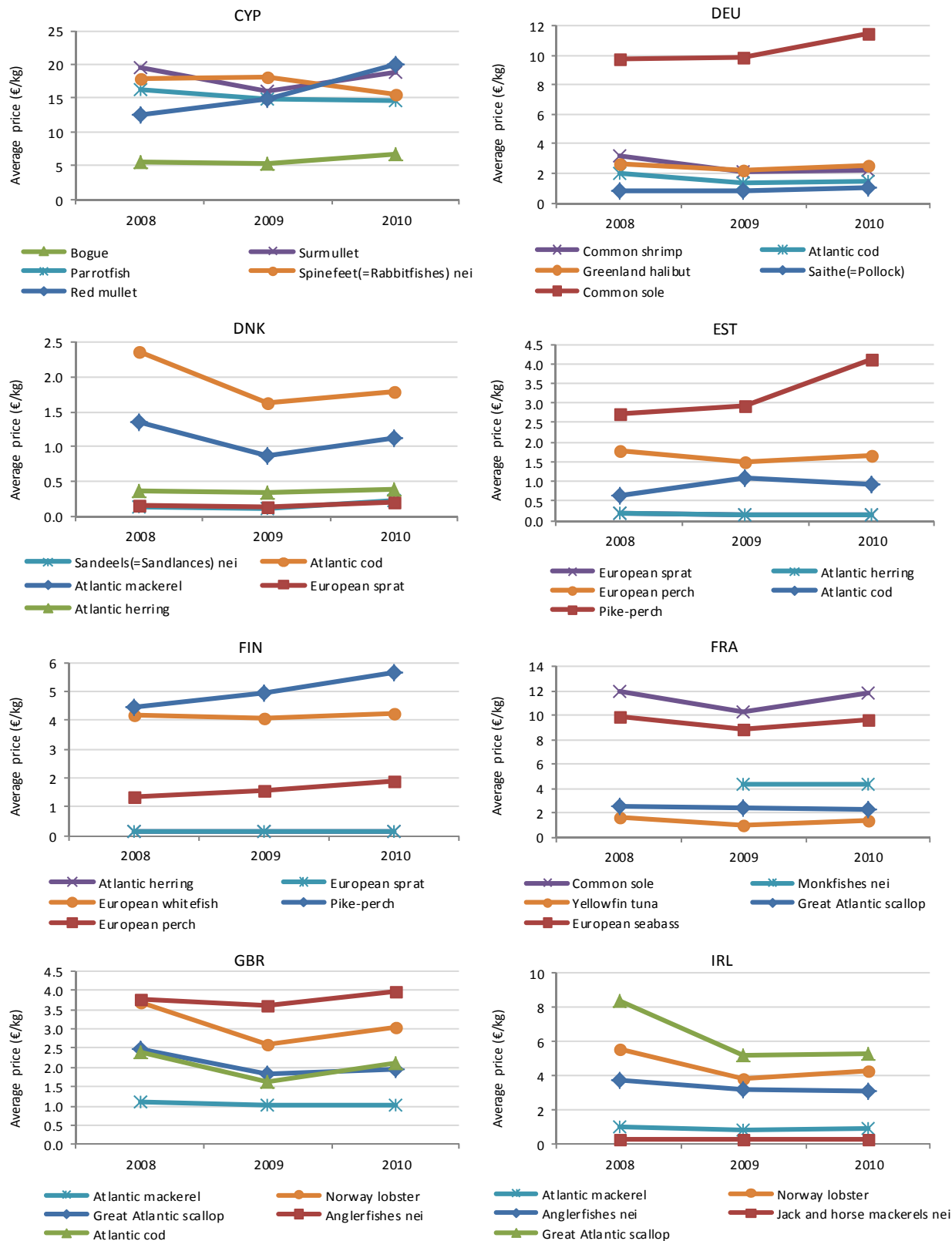


Figure 6.15 cont. Average price trends (€/kg) of the top 5 species in terms of total landings value by Member State. (Source: EU Member States DCF data submissions)

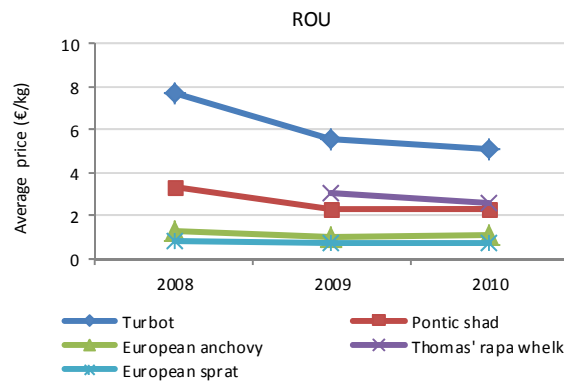
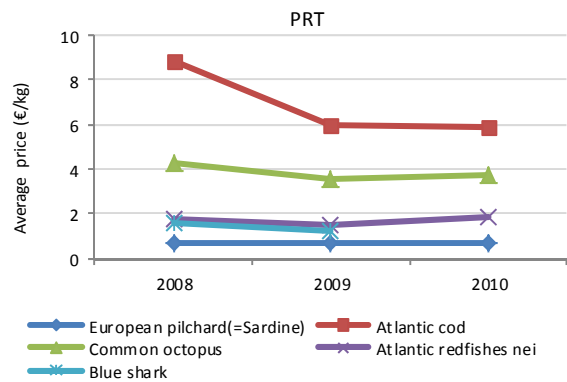
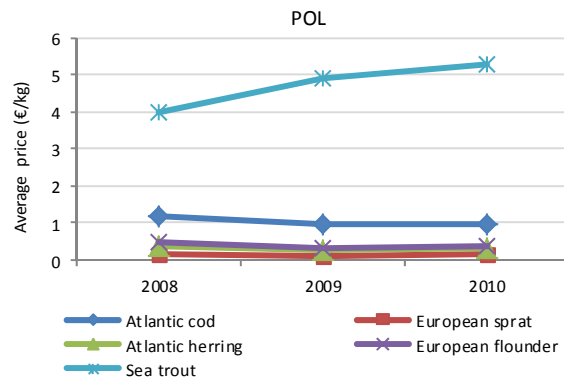
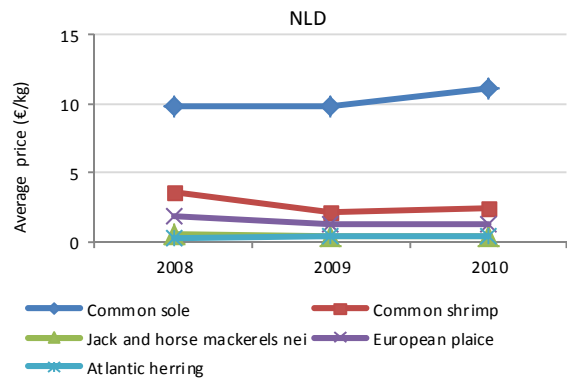
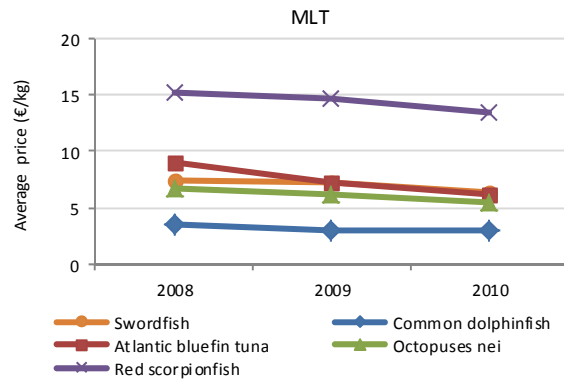
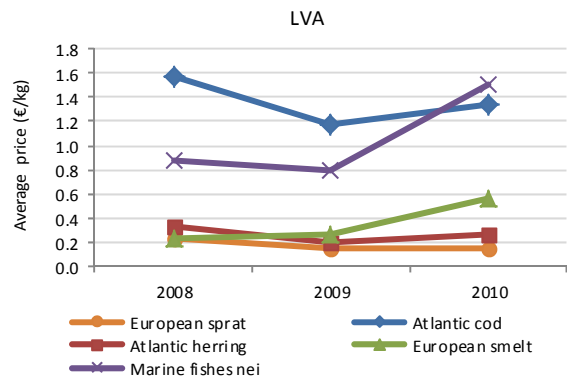
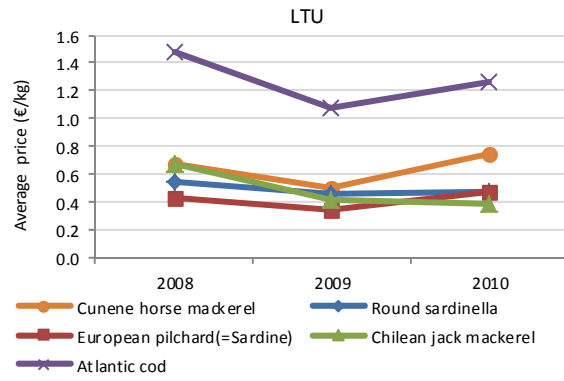
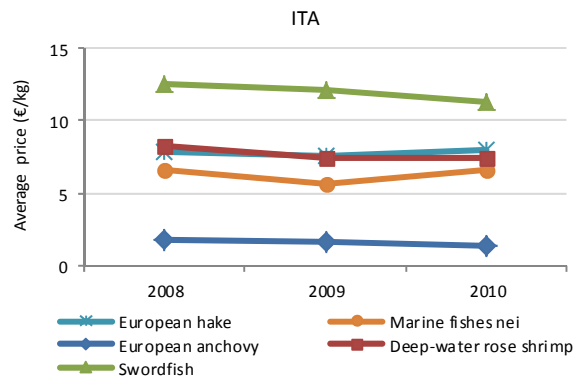


Figure 6.15 cont. Average price trends (€/kg) of the top 5 species in terms of total landings value by Member State.  
(Source: EU Member States DCF data submissions)

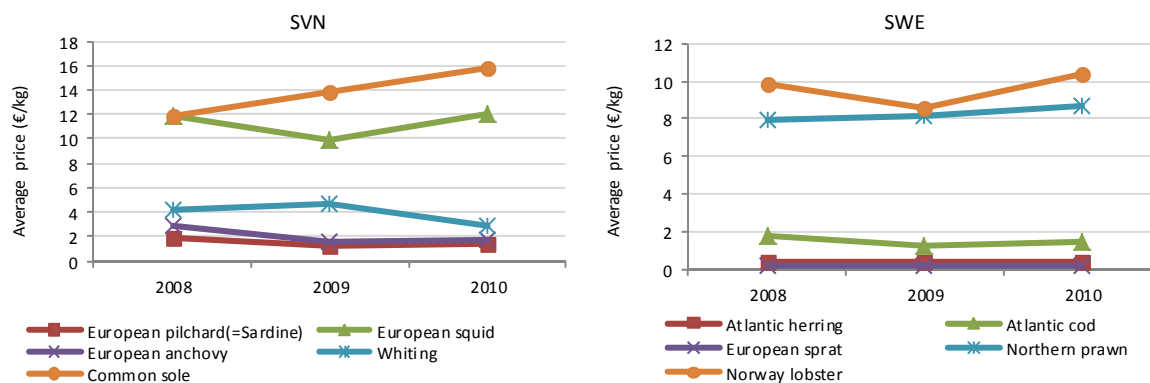


Figure 6.15 cont. Average price trends (€/kg) of the top 5 species in terms of total landings value by Member State.  
(Source: EU Member States DCF data submissions)

### 6.4.9 Price Trends by Fishing gear

Figure 6.16 examines the average price trends by fishing gear and Member State.

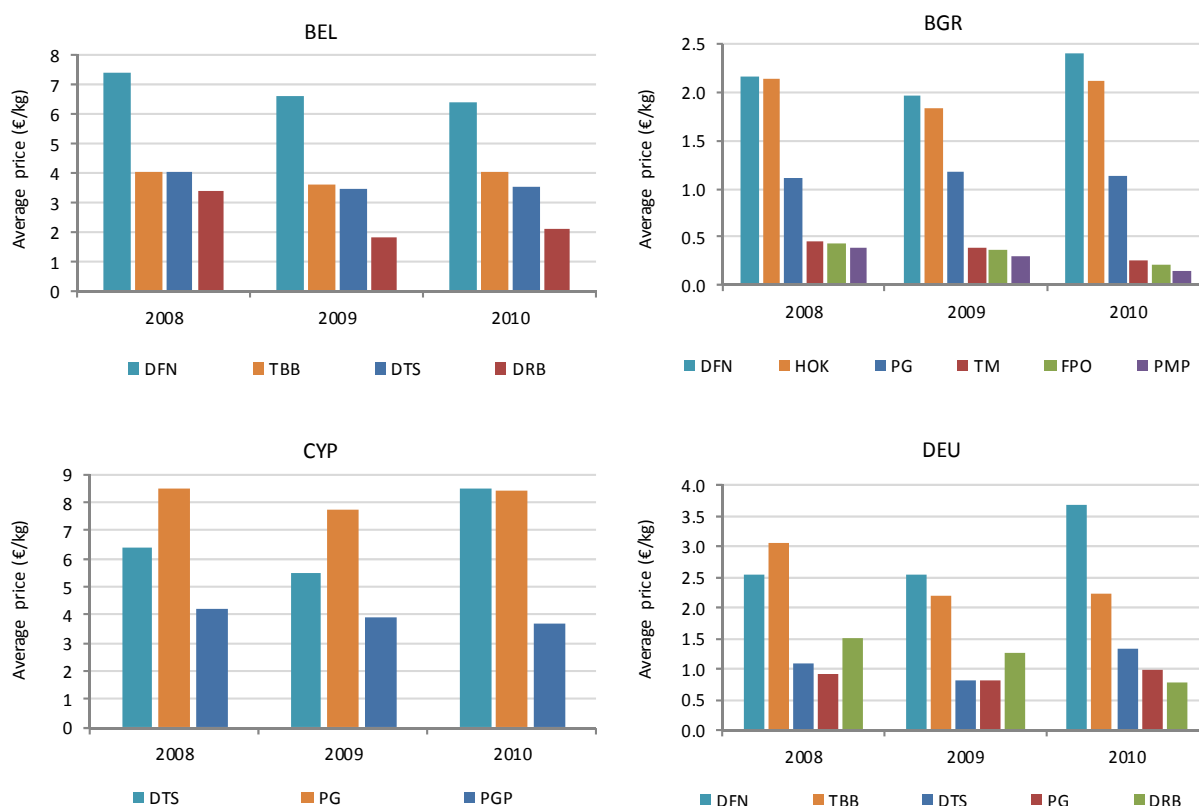


Figure 6.16 Average price trends (€/kg) by fishing gear by Member State.  
(Source: EU Member States DCF data submissions)

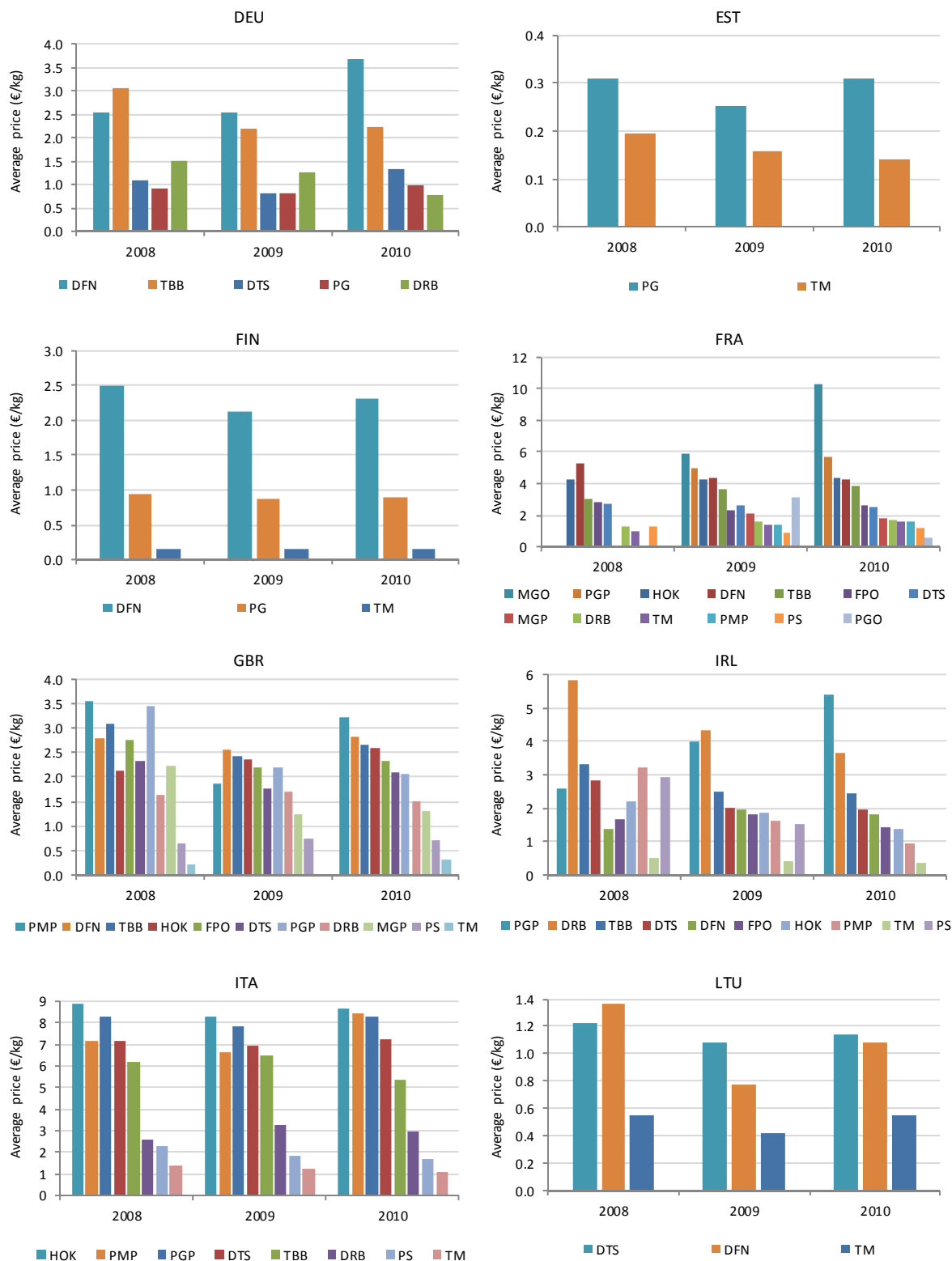


Figure 6.16 cont. Average price trends (€/kg) by fishing gear by Member State.  
(Source: EU Member States DCF data submissions)

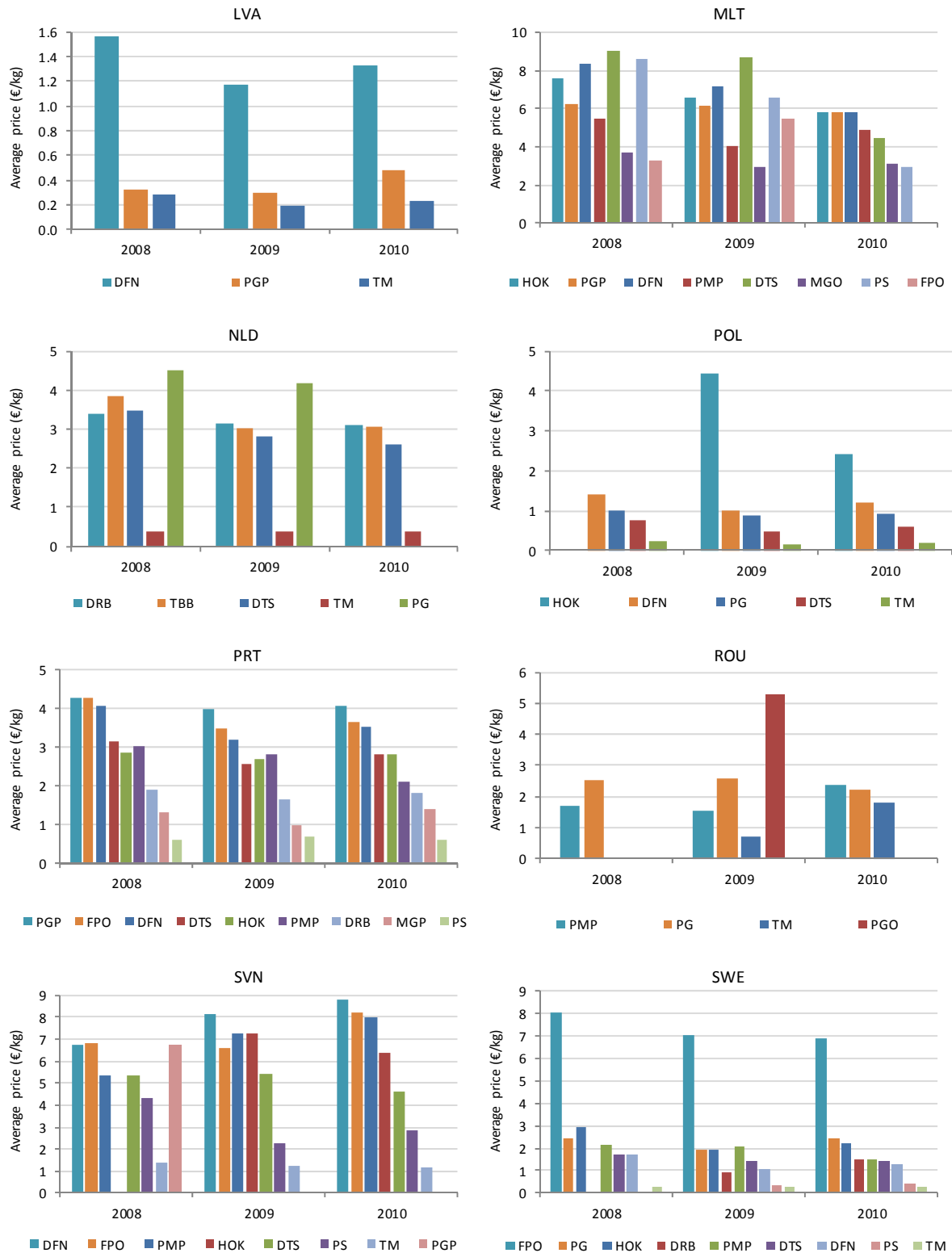


Figure 6.16 cont. Average price trends (€/kg) by fishing gear by Member State.  
(Source: EU Member States DCF data submissions)

## 6.4.10 Price Trends by Vessel Length

Figure 6.17 examines the average price trends seafood landed by vessel length by Member State.

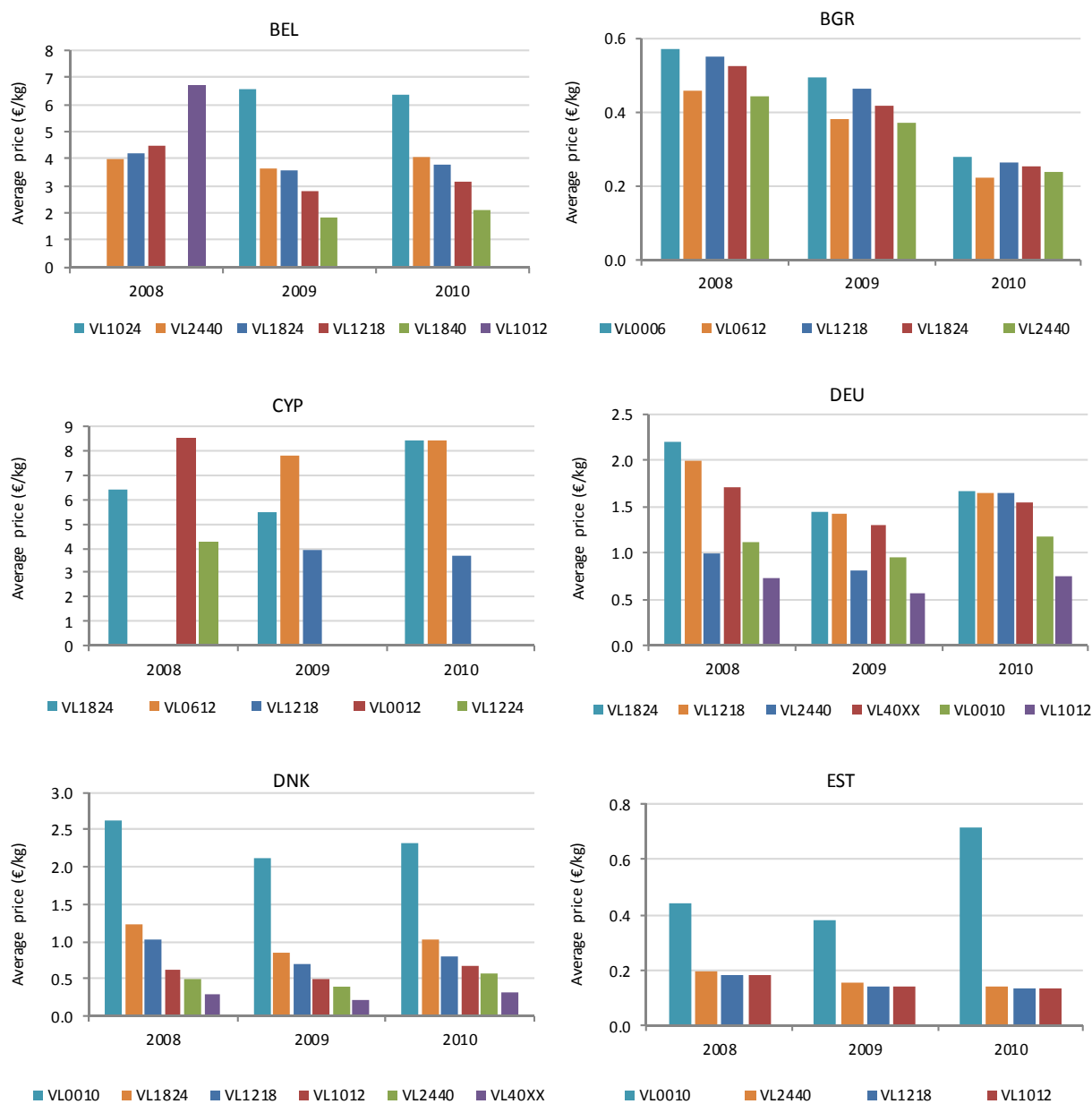


Figure 6.17 Average price trends (€/kg) by vessel length by Member State.

(Source: EU Member States DCF data submissions)

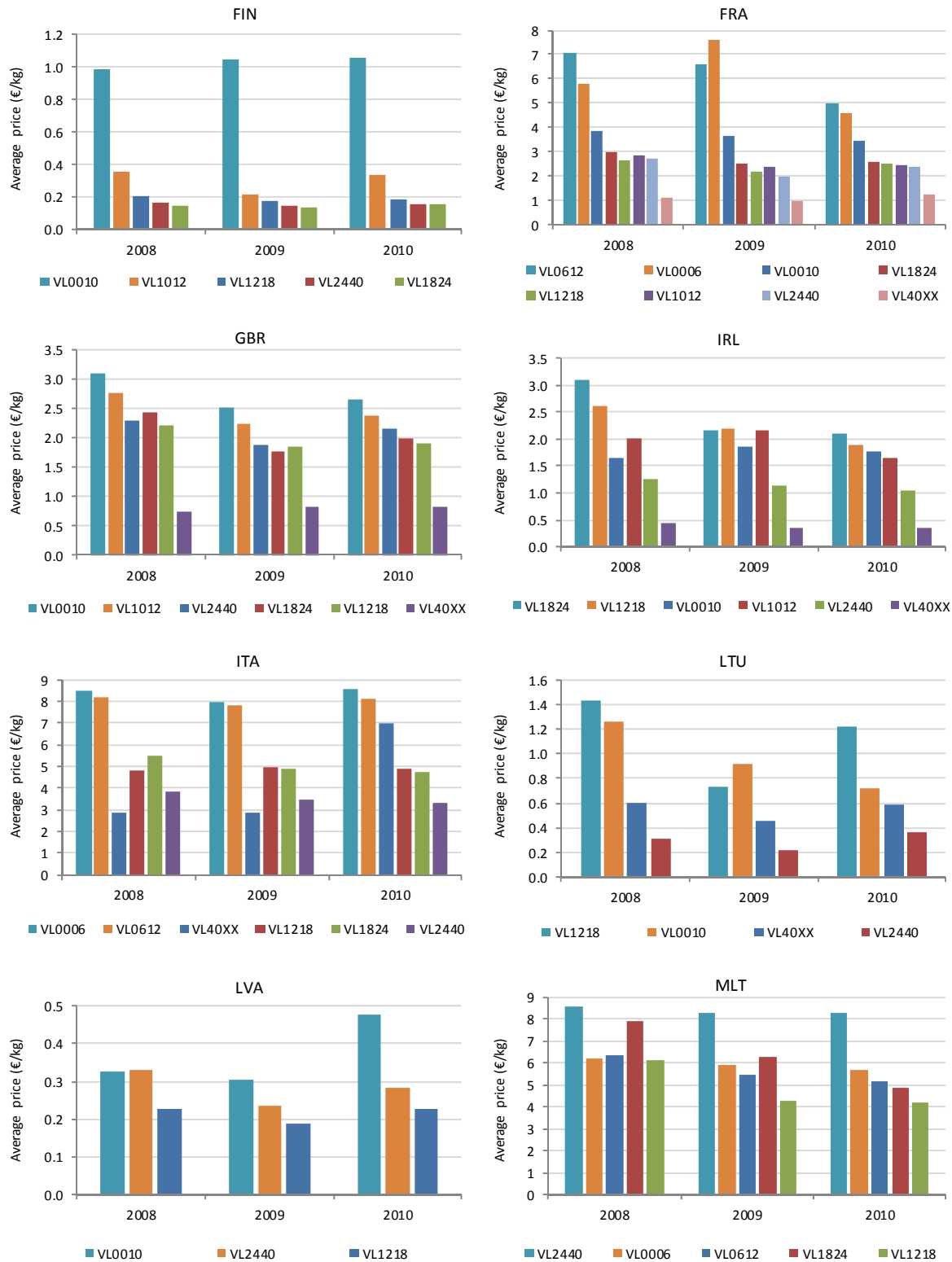


Figure 6.17 cont. Average price trends (€/kg) by vessel length by Member State.  
(Source: EU Member States DCF data submissions)



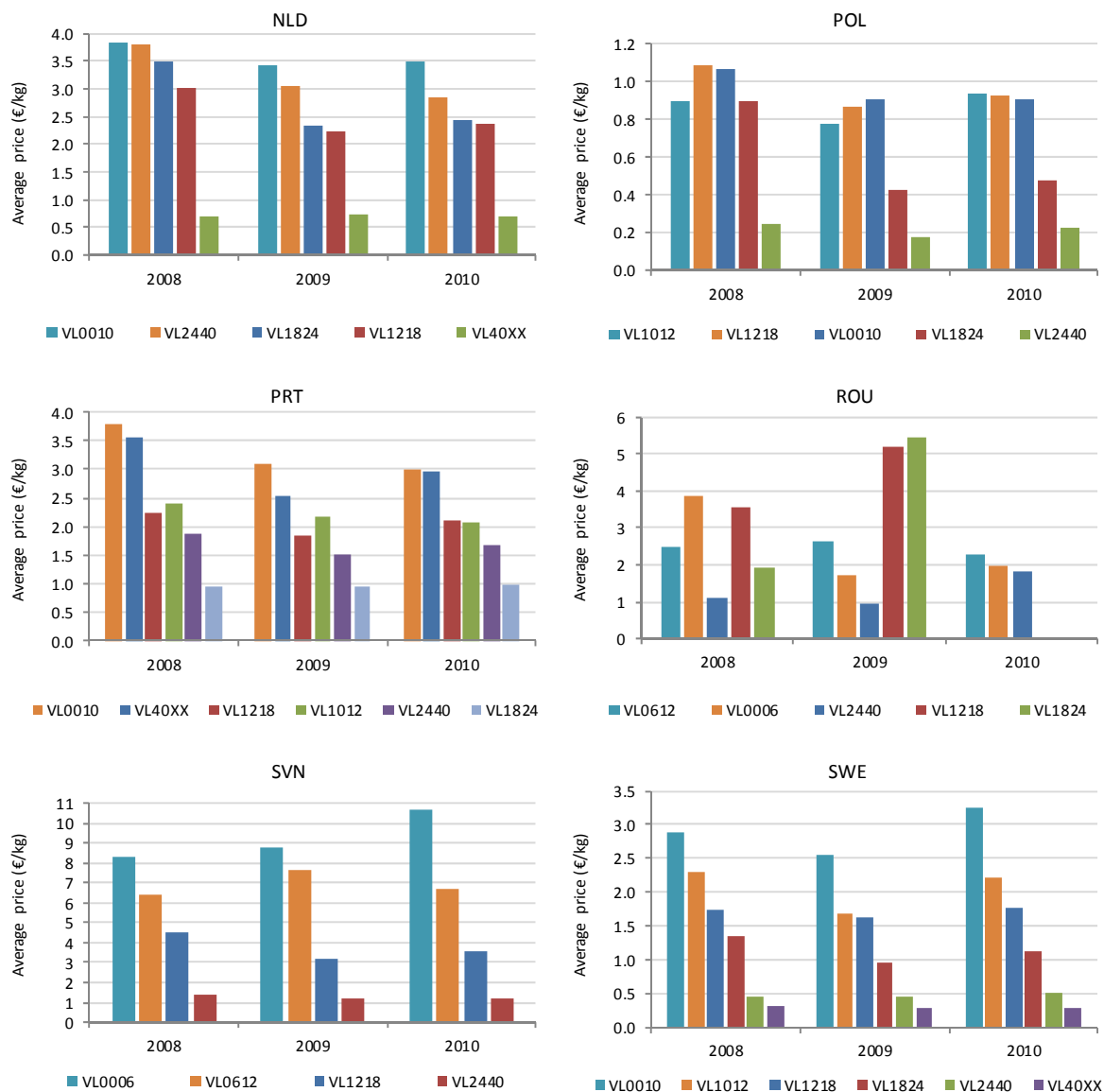


Figure 6.17 cont. Average price trends (€/kg) by vessel length by Member State.  
(Source: EU Member States DCF data submissions)

## 6.5 Conclusions and Outlook

After 2009, a year marked by market problems, 2010 was better in terms of landings and average prices for the majority of the species landed. The average price of seafood landings in all Member States analysed increased by 6,3% in 2010 when compared to 2009. Situations are nevertheless contrasted by region, country and fleet segment concerned. Average prices vary widely, depending on variables such as fishing gear or vessel length. Target species by vessels, the marketing channels used and fishing technique practised are all parameters that influence the market price by species, which is an essential element that enables the sector to perpetuate its activity.

Apart from these inherent sector-wide features, the most evident contributing factors to seafood prices in the times series analysed were high fuel prices and the financial crisis in the Euro zone in late 2008, the effects of which are still being felt today. Fuel prices have a large impact on fisheries, in particular on the more fuel intensive fisheries. Higher fuel prices increase the total expenditure of the fleet, reducing vessel income.

Fuel price began to increase in 2008, reaching record highs in mid-2008, but subsequently decreased during the second half of the year. Fuel price remained low in the first part of 2009 but again began a steady increase throughout the rest of 2009, and continued during 2010-2011. Lower fuel prices in 2009 are reflected in the general lower seafood prices observed. By and large, the seafood production bounced back in 2010. This was due, in part, to lower fuel prices and higher average fish prices, which had seen declines after the crisis struck in late 2008 and continued through 2009. In fact, there was a worldwide recovery of seafood demand in 2010 and 2011. Currently, fuel prices are again reaching or exceeding the levels seen in 2008 and this will clearly reduce profits in the short to mid-term. However, in the longer term it may act as an incentive to develop less fuel intensive fishing methods.

The financial crisis has also reduced the purchasing power of many consumers and worsen future expectations. This resulted in a reduction (or a shift to cheaper seafood products) in the demand for seafood products, and all other products. In the present economic climate, the overall demand for medium and lower value species is expected to expand.

On the other hand, seafood prices are also affected by different management measures such as TACs and quotas. Increased fishing opportunities should favour lower seafood prices, and vice-versa, all else being equal. In 2010, quotas from several main species were reduced, such as haddock, cod and sole. The 2011, also saw the reduction of TACs and quotas for main fish stocks, such as cod and haddock. Again, this is reflected in the higher average prices for seafood products observed for 2010 and 2011. However, seafood prices are expected to fall as the increased quotas of many important fish stocks in 2012 will probably limit prices. The lack of agreement over the mackerel quotas between the EU, Norway, Iceland and Faroe is continuing to cause concern over the health of the stock and future fishing opportunities for several MS vessels. An increase in landings volume by vessels from other countries can be expected to put downward pressure on global prices for mackerel, putting further pressure on several EU pelagic fleets.

The proposed EU ban on discards may also affect seafood prices if and when it comes into effect. Discarding is a consequence of the strict quotas in the EU under the CFP. Many fishermen throw back lower value fish so they can maximise their profits. Hence, it is a common assumption that the impact of a discard ban will be an overall reduction in fish prices due to the landing of greater proportions of smaller, lower value fish. However, in the short term any negative impacts can be lessened if appropriate measures are taken such as, increased gear selectivity. Increased selectivity may even, in the long term, increase fish prices and profit margins, as suggested in the study 'Impact Assessment of Discard Reducing Policies' (European Commission 2011).

Another important factor that can affect seafood prices is increased imports of cheaper commodities and further developments in aquaculture, the effects of which may cause stagnation or even falling seafood market prices.

FAO recently commissioned a Fish Price Index (FPI) (Tveteras et al. 2012) in order to fill the gap in coverage of global food prices of FAO's food price index, which has previously failed to account for seafood, a key contributor to the global food system. The FPI is analogous to the well know consumer price index as it attempts to measure the extent that seafood, as opposed to consumer goods as a whole, is becoming more or less expensive.

As the Fish Price Index (FPI) shows, fish prices when compared to terrestrial food appear to be less volatile and hence, less subject to price spikes. Another conclusion from the study was that the index for captured fish started to increase in 2002, and although limited compared to other foodstuffs, shows an impact of the food crisis of 2007-2008 as it peaks in 2008.

As shown by the FAO Fish Price Index, fish prices are currently higher on average than ever before, and apparently higher than the levels reached before the start of the 2008 economic crisis. Aquaculture products in particular have shown strong increases and at present levels are 23% higher than in September 2008. Capture seafood prices on the other hand have only recently regained pre-crisis price levels. The FPI also shows that after a strong 2010, the current year (2011) is expected to yield new records in the international fish trade (Tveteras et al. 2012).

From a management point of view, the FPI may serve as a useful tool. If the FPI starts to trend upward more than prices of other animal protein sources, it may reflect unsolved problems of overfishing, aggregate impacts of climate change, reaching the limits of forage fish used in aquaculture feed, or other degradation of marine ecosystems. Alternatively, an FPI that continues to trend lower than other animal proteins could indicate improvements in oceans governance, net positive impacts from climate change, or continued technological change in aquaculture that lowers costs and ultimately prices to consumers (Tveteras et al. 2012).

## 6.6 References

Asche, F & J Guillen 2012. The importance of fishing method, gear and origin: The Spanish hake market. *Marine Policy*. vol. 36: 365-369.

European Commission 2011. Studies in the field of the Common Fisheries Policy and Maritime Affairs. Lot 4: Impact Assessment Studies related to the CFP. Impact Assessment of Discard Reducing Policies Case Study Annex. 40pp.

Kristofersson, D & K Rickertsen 2004. Efficient Estimation of Hedonic Inverse Input Demand Systems. *American Journal of Agricultural Economics*, Agricultural and Applied Economics Association, vol. 86(4): 1127-1137.

McConnell KE & IE Strand 2000. Hedonic Prices for Fish: Tuna Prices in Hawaii. *American Journal of Agricultural Economics*, Agricultural and Applied Economics Association, vol. 82(1): 133-144.

Tveteras, S, F Asche, MF Bellemare, MD Smith, AG Guttormsen, et al. 2012. Fish Is Food – The FAO Fish Price Index. *PLoS ONE* 7(5):e36731. doi: 10.1371/journal.pone.0036731



## **7. ECONOMIC INDICATORS FOR ASSESSING BALANCE BETWEEN FLEET CAPACITY AND FISHING OPPORTUNITIES**

### **7.1 Main Conclusions and Recommendations**

The foregone profits indicator would be a useful addition to the suite of balance indicators already in existence as it can inform of the potential profitability implications of operating different fleet sizes.

However, further discussion is required on the methodology employed in estimating the foregone profits, in particular issues surrounding the technical utilisation ratio calculating.

The use of target reference points for the social balance indicators were chosen pragmatically by experts and are not suggested to be the most appropriate for each MS.

Care should be taken to avoid using an estimate of foregone profits in relation to income as an approximation for the extent of overcapacity within a fleet segment, however, when results are evaluated alongside existing balance indicators, an overall qualitative evaluation of the extent of over- or under-capacity should be achievable.

### **7.2 Introduction**

The purpose of this chapter of the AER is to:

- 1) Test methodology on the estimation of foregone profits for technically under-utilised fleets devised by STECF EWG 11-17 using latest fleet economic DCF data. Two fleets segments for each Member State were selected, and correspond to the 'fleets of special' interest in each national chapter of the AER.
- 2) Calculate existing economic and social 'balance' indicators contained within the DG MARE guidelines for improved analysis of the balance between fishing capacity and fishing opportunities for the same two fleet segments.
- 3) Assess both the balance indicator results and the foregone profit estimates against existing or newly devised target reference points, so that results can be categorised into a 'traffic light' approach
- 4) Provide a qualitative evaluation of the results and, in particular, consider their meaning in relation to the balance between fleet capacity and fishing opportunities from an economic perspective.

### 7.3 Indicator target reference points (TRPs)

To evaluate both the estimates of profits foregone and the economic and social balance indicators, a simple traffic light approach was employed, similar to the traffic light system devised in previous STECF working groups (see STECF EWG 11-17 working group report). TRPs either already existed (as in the case for ROI (or ROFTA), CR/BER and crew wage per FTE) or needed to be defined by experts (foregone profits as a percentage of income, GVA as a percentage of income). For the latter, TRPs were agreed during and following STECF EWG 12-05. These TRPs are somewhat pragmatic selections, and it can be argued that alternative values are equally as appropriate. Table 7.1 contains the TRPs for the indicators under assessment, along with the corresponding traffic light.

Table 7.1: Target reference points for foregone profits and balance indicators

Indicator	Definition	Green	Amber	Red
FOREGONE PROFITS	Profits foregone as a result of fleet under-utilisation.	Net profit foregone < 5% of total income	Net profit foregone > 5%, < 10% of total income	Net profit foregone > 10% of total income
ECONOMIC BALANCE INDICATOR 1	Return on Investment (ROI) or fixed tangible assets (ROFTA)	ROI > target ref point	0 < ROI < target ref point	ROI < 0
ECONOMIC BALANCE INDICATOR 2	CR/BER	>1	>0.9, <1	<0.9
SOCIAL BALANCE INDICATOR 1	Crew wages per FTE	Crew wage per FTE > MS average wage	MS Average Wage < Crew wage per FTE > MS minimum Wage	Crew wage per FTE < MS minimum wage
SOCIAL BALANCE INDICATOR 2	GVA as % of Income	GVA as % of Income ≥ EU fleet average GVA as % of income	GVA as % of Income < EU fleet average GVA as % of income, GVA > 0	GVA ≤ 0

For profits foregone estimates, arbitrary cut-offs for the TRPs were created. The WG decided that if profits forgone as a proportion of income were less than 5%, then a green traffic light should be applied as removing fixed costs from the segment based on the capacity utilisation ratio did not significantly alter profitability. When profits forgone as a proportion of income were greater than 5% but less than 10%, an amber traffic light should be applied, and when profit forgone as a proportion of income was greater than 10%, a red traffic light should be applied. The WG acknowledges that these TRPs should be given further thought if this indicator is to be assessed on a more regular basis.

For the ROI indicator (ROFTA) the TRP is essentially the real interest rate (see section 7.3.5). If the ROI is greater than the real interest rate for a particular MS, then a green traffic light is applied. If the ROI is

lower than the real interest rate but greater than zero, then an amber traffic light is applied. If the ROI is negative, then a red traffic light is applied.

For the CR/BER ratio, the TRP is 1. As capital costs were included in the equation, for a CR/BER ratio of 1 a green traffic light is applied. For this indicator, an arbitrary cut-off point of 0.9 was introduced to differentiate between an amber light and a red light. Greater than 0.9 but less than 1, an amber light is applied, less than 0.9 and a red light is applied. A slight alternative to this TRP could be to calculate CR/BER including capital costs, and allocate a green traffic light to results above 1. For results below 1, calculate CR/BER again but exclude the capital costs, and where results are greater than 1 (but below 1 when capital costs are included), an amber traffic light is applied. If CR/BER is less than 1 when calculated both with and without capital costs, then apply a red traffic light.

For the average crew wage per FTE indicator, the TRPs were the average and minimum wage in each Member State, information which is readily available from EUROSTAT. Fleet segments with average wages greater than the Member States average wage were assigned green traffic lights. Fleet segments with average wages less than the Member States average wage but greater than the Member States minimum wage were assigned an amber traffic light, while fleet segments with average wages lower than the Member States minimum wage were assigned a red traffic light.

For the 'GVA as a proportion of income' indicator, the TRP was the GVA as a proportion of income for the overall EU fleet in the reference year. If the GVA as a proportion of income for a fleet segment was greater than the same value at EU level, then a green traffic light was applied. If the GVA as a proportion of income for a fleet segment was lower than the same value at EU level, but still positive, an amber traffic light was applied. If the GVA was negative, a red traffic light was applied.

## **7.4 Results**

Table 7.2 contains, for each fleet segment of special interest (see relevant national chapters of this AER for detailed analyses of these fleets), the estimated results of both profits forgone for 2010, and the economic (ROI, CR/BER) and social (Wages per FTE, GVA as % of income) balance indicators for 2008-2010.

With respect to table 7.2, section 1 contains the results of the profits forgone calculations. Here, four different results for each fleet segment are presented, all of which refer to the year 2010. The different profits foregone estimates are based on: 1) the ratio between the vessel using the most days at sea in the segment and the average days at sea for that segment under both variable and fixed capital assumptions; and 2) the ratio between the days at sea for the top 10% of vessels (who spent the most days at sea) and the average days at sea for that fleet segment, again under both the variable and fixed capital assumptions. Profit forgone results are shown as a proportion of income.

Section 2 of table 7.2 provides results for ROFTA for each fleet segment from 2008 to 2010, including a three year average of results. Section 3 provides the results for the CR/BER ratio for each segment from 2008-2010 with a three year average for results. Similarly, sections 4 and 5 contain average wage per FTE and GVA as a proportion of income results for 2008-2010, respectively.

Sections 7.5.1 to 7.5.20 contain a qualitative evaluation of the results of each indicator for each Member State. Figures 7.1 to 7.5 contain the results of each indicator in ordered bar charts.

Table 7.2: Forgone profits and balance indicator results by fleet segment of special interest

Indicator	1) Profits (as % of income) foregone as a result of fleet technical under-utilisation in 2010				2) Return on tangible fixed assets (ROFTA)				3) Current revenue / Break-even revenue ratio (CR/BER)				4) Average personnel cost per Full-time Equivalent (FTE)				5) Gross Value Added (GVA) as % of income			
	max days = top vessel - malleable capital	max days = top vessel - non-malleable capital	max days = top 10% of vessels - malleable capital	max days = top 10% of vessels - non-malleable capital	2008	2009	2010	3 year Average	2008	2009	2010	3 year Average	2008	2009	2010	3 year Average	2008	2009	2010	3 year Average
Fleet segment & Year																				
BEL AREA27 TBB VL1824	6.0%	5.0%	3.0%	3.0%	-49.7%	-0.1%	1.1%	-16.2%	-0.24	0.80	1.00	0.52	76,869	70,280	64,736	70,628	24.3%	44.7%	43.1%	37.4%
BEL AREA27 TBB VL2440	3.0%	2.0%	3.0%	2.0%	-28.0%	-4.3%	6.0%	-8.8%	0.11	0.71	1.18	0.67	76,082	77,648	84,853	79,528	27.9%	40.4%	46.1%	38.1%
BGR AREA37 PMP VL1218	n/a	n/a	n/a	n/a	25.4%	-245.8%	-12.4%	-77.6%	5.89	-5.08	-0.31	0.17	3,945	1,569	3,060	2,858	38.2%	-101.9%	14.6%	-16.4%
CYP AREA37 PG VL0612	n/a	n/a	n/a	n/a	n/a	-22.3%	-14.9%	-12.4%	n/a	n/a	n/a	n/a	n/a	648	1,093	871	n/a	n/a	n/a	n/a
DEU AREA27 DTS VL40XX	0.0%	0.0%	0.0%	0.0%	-7.9%	-3.3%	5.3%	-2.0%	0.61	0.68	1.20	0.83	90,918	72,641	86,413	83,324	37.8%	44.4%	50.1%	44.1%
DEU AREA27 TBB VL1824	4.0%	3.0%	2.0%	2.0%	31.2%	4.1%	17.0%	17.4%	2.52	1.04	1.51	1.69	63,341	47,296	61,619	57,418	65.6%	50.1%	51.4%	55.7%
DNK AREA27 DTS VL1218	15.0%	10.0%	11.0%	7.0%	-3.8%	-8.7%	2.7%	-3.3%	0.82	0.51	1.09	0.81	53,033	52,595	56,122	53,917	55.7%	54.2%	58.9%	56.3%
DNK AREA27 DTS VL40XX	6.0%	3.0%	5.0%	3.0%	3.5%	3.0%	38.6%	15.0%	1.09	1.02	2.29	1.46	89,836	90,999	108,093	96,309	65.7%	66.1%	75.6%	69.1%
ESP AREA27 DTS VL2440	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	0.12	0.47	0.90	0.50	20,864	28,328	24,687	24,626	26.9%	38.1%	41.1%	35.4%
ESP AREA27 PMS VL40XX	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	1.11	0.76	1.65	1.18	33,319	35,902	40,122	36,448	38.8%	34.9%	51.4%	41.7%
EST AREA27 TM VL1218	5.0%	3.0%	5.0%	3.0%	-9.1%	-13.8%	12.2%	-3.6%	-0.49	-0.41	1.33	0.15	6,502	8,503	8,065	7,690	43.6%	31.6%	58.9%	44.7%
EST AREA27 TM VL2440	7.0%	5.0%	7.0%	4.0%	31.0%	20.3%	4.3%	18.5%	3.20	1.44	1.06	1.90	16,710	16,101	17,333	16,714	62.0%	62.2%	56.6%	60.3%
FIN AREA27 TM VL1218	16.0%	11.0%	15.0%	10.0%	6.8%	-2.9%	14.1%	6.0%	1.53	0.72	1.76	1.34	37,391	47,910	31,644	38,982	58.6%	58.2%	57.9%	58.2%
FIN AREA27 TM VL1824	13.0%	9.0%	12.0%	9.0%	10.2%	17.8%	15.6%	14.6%	1.66	1.93	1.54	1.71	43,862	49,299	52,446	48,536	59.7%	59.5%	66.0%	61.7%
FRA AREA27 DTS VL1824	n/a	n/a	n/a	n/a	-3.5%	n/a	1.8%	-0.6%	0.80	1.69	1.02	1.17	49,548	47,493	44,648	47,230	33.0%	42.8%	38.6%	38.1%
FRA AREA27 DTS VL2440	n/a	n/a	n/a	n/a	-3.1%	n/a	-3.8%	-2.3%	0.82	1.19	0.77	0.93	61,001	49,209	46,928	52,379	35.6%	37.9%	34.2%	35.9%
GBR AREA27 DTS VL1824	9.0%	8.0%	8.0%	7.0%	-2.7%	4.0%	27.4%	9.6%	0.94	1.06	1.44	1.15	25,482	20,888	22,577	22,982	32.3%	33.5%	39.0%	34.9%
GBR AREA27 DTS VL2440	6.0%	5.0%	6.0%	5.0%	-11.4%	-1.9%	79.2%	22.0%	0.78	0.94	2.28	1.33	37,466	33,593	33,729	34,929	27.9%	29.9%	45.8%	34.5%
IRL AREA27 DTS VL1824	7.0%	6.0%	6.0%	5.0%	0.6%	-3.1%	-5.0%	-2.5%	0.96	0.61	0.44	0.67	30,272	24,786	35,516	30,191	34.2%	35.6%	39.1%	36.3%
IRL AREA27 TM VL40XX	9.0%	7.0%	8.0%	6.0%	1.1%	4.2%	7.8%	4.4%	0.98	0.83	1.02	0.94	63,574	72,732	98,875	78,394	47.6%	55.7%	58.7%	54.0%
ITA AREA37 DTS VL1218	5.0%	3.0%	4.0%	3.0%	25.5%	50.8%	40.5%	38.9%	1.77	2.42	2.18	2.12	13,295	20,541	18,823	17,553	44.1%	61.9%	57.9%	54.6%
ITA AREA37 DTS VL1824	8.0%	4.0%	7.0%	4.0%	4.8%	13.9%	6.3%	8.3%	1.13	1.33	1.13	1.20	16,079	20,345	18,075	18,166	44.9%	56.4%	50.0%	50.5%
LTU AREA27 DFN VL0010	23.0%	19.0%	19.0%	16.0%	9.1%	51.7%	-9.2%	17.2%	3.12	2.67	0.39	2.06	841	2,719	2,786	2,115	63.1%	68.8%	37.7%	56.5%
LTU AREA27 DTS VL2440	13.0%	13.0%	11.0%	10.0%	6.7%	5.5%	11.6%	7.9%	2.25	0.90	1.16	1.44	14,700	5,404	6,053	8,719	48.7%	31.2%	31.0%	37.0%
LVA AREA27 TM VL2440	9.0%	8.0%	11.0%	10.0%	28.2%	19.7%	18.5%	22.1%	-8.95	1.63	1.25	-2.02	13,712	15,045	17,445	15,401	66.6%	59.1%	50.3%	58.7%
MLT AREA37 DTS VL1824	68.3%	38.7%	58.9%	33.4%	7.4%	-15.5%	-31.2%	-13.1%	1.40	-0.21	-0.30	0.29	61,991	11,018	26,966	33,325	56.8%	30.5%	0.7%	29.3%
MLT AREA37 HOK VL1824	28.4%	14.5%	26.7%	13.6%	-13.1%	-24.3%	-30.9%	-22.8%	0.29	-0.26	-0.51	-0.16	23,587	32,750	8,455	21,597	29.5%	45.7%	3.6%	26.3%
NLD AREA27 TBB VL1218	n/a	n/a	n/a	n/a	8.2%	9.7%	3.0%	6.9%	1.28	1.37	1.06	1.23	33,386	19,874	24,409	25,890	52.2%	54.9%	53.3%	53.5%
NLD AREA27 TM VL40XX	n/a	n/a	n/a	n/a	-11.5%	-7.3%	-8.5%	-9.1%	0.19	0.18	0.32	0.23	71,174	61,009	65,164	65,782	21.4%	21.8%	26.4%	23.2%
POL AREA27 DTS VL1218	6.0%	5.0%	6.0%	4.0%	2.8%	12.0%	16.1%	10.3%	1.15	2.42	2.47	2.01	10,308	8,046	7,279	8,544	47.5%	62.0%	55.5%	55.0%
POL AREA27 TM VL2440	5.0%	4.0%	5.0%	4.0%	-3.2%	9.0%	9.7%	5.2%	0.50	1.88	1.56	1.31	12,104	8,298	10,576	10,326	30.4%	49.0%	46.5%	42.0%
PRT AREA27 DTS VL2440	7.0%	5.0%	6.0%	4.0%	-6.0%	4.5%	2.9%	0.5%	0.81	0.98	0.97	0.92	25,195	22,658	22,897	23,583	35.9%	50.2%	46.3%	44.1%
PRT AREA27 PS VL1824	3.0%	2.0%	3.0%	2.0%	30.9%	4.4%	84.5%	39.9%	2.10	0.98	2.59	1.89	18,144	16,748	14,427	16,440	75.0%	74.6%	71.3%	73.6%
SVN AREA37 DFN VL0612	2.6%	1.4%	n/a	n/a	37.3%	63.1%	-25.0%	25.1%	-44.25	18.29	-3.23	-9.73	n/a	n/a	5,253	5,253	n/a	n/a	14.8%	n/a
SVN AREA37 TM VL2440	0.0%	0.0%	0.0%	0.0%	47.1%	115.6%	-67.2%	31.8%	-55.88	33.51	-12.75	-11.71	n/a	n/a	238,183	238,183	n/a	n/a	-56.1%	n/a
SWE AREA27 DTS VL2440	22.0%	14.0%	20.0%	12.0%	-21.9%	10.3%	-2.8%	-4.8%	0.35	1.32	0.83	0.83	36,708	32,109	32,799	33,872	32.0%	44.6%	40.5%	39.1%
SWE AREA27 TM VL40XX	19.0%	10.0%	18.0%	10.0%	-5.0%	8.4%	6.8%	3.4%	0.84	1.22	1.25	1.10	38,287	31,640	32,645	34,191	49.7%	45.8%	58.6%	51.4%



#### **7.4.1 Belgium**

The Belgian beam trawl fleet has a limit on the number of days at sea per vessel each year of around 260 days (some years it is 255, other years it is 265). These limitations are part of the measures implemented for recovery of sole stocks. A sole recovery zone was established in February 2004 to apply effort controls to vessels of 10m or over using certain gears in the Western Channel (ICES division VIIe).

The profits foregone indicators for the 24-40m beam trawl segment all returned green traffic lights, indicating that under all assumptions profits foregone were less than 5% of total income, so this segment was close to fishing at maximum utilisation in 2010. ROFTA results were assigned red lights in 2008 and 2009, and a green light in 2010. The same pattern was observed for the CR/BER ratio, indicating a significant improvement in profitability compared to the previous two years. Average wage per FTE were assigned green traffic lights for all years, indicating that wages were always above the national average. Results for GVA as % of income were assigned amber lights for all years, indicating a positive GVA but one that is below the EU average in relation to income. There is therefore no real indication of any over-capacity based on the indicators presented for 2010, although this may not have been the case in earlier years.

Forgone profits results for the 18-24m beam trawl segment returned amber lights (forgone profit as % of income was greater than 5% but lower than 10%) for 2010 only when the maximum days at sea for the single most active vessel was used to calculate the capacity utilisation ratio, otherwise they were assigned green lights under the top 10% scenario. ROFTA results were assigned a red traffic light in 2008 and an amber in 2009 and 2010. The CR/BER ratio results were assigned a red traffic light in 2008 and 2009 and a green light in 2010. Average wages per FTE were assigned green traffic lights across the time series, indicating wages were always above the national average. GVA as % of income were all assigned amber traffic lights, indicating a positive GVA but one that is below the EU average in relation to income. Although the indicators suggest this fleet is not quite as profitable as the 24-40m segment, again there are no real signs of any overcapacity based on the indicators presented for 2010, although this may not have been the case in earlier years.

#### **7.4.2 Bulgaria**

It was not possible to calculate profits foregone for the Bulgarian polyvalent mobile and passive 12-18m segment as no data on maximum days at sea was available to the working group.

Results for the economic balance indicators (ROFTA and CR/BER) are consistent in the sense that for 2008, both indicators are assigned green traffic lights, then for 2009 and 2010 both are assigned red traffic lights. Furthermore, results for 2009 look questionable. Results for average wage per FTE are assigned a green traffic light for 2008 and then amber traffic lights for 2009 and 2010. GVA as % of income are assigned amber traffic lights in 2008 and 2010 and red traffic lights in 2009, suggesting that the Bulgarian fleet generated no gross value added in 2009. If the negative returns on investment for both 2009 and 2010 continue, there may be an element of overcapacity within this segment of the Bulgarian fleet. The indicators certainly suggest a deteriorating situation, however data quality is a potential issue here.

### **7.4.3 Cyprus**

It was not possible to calculate profits foregone for the Cypriot passive gears 6-12m segment as no data on maximum days at sea was available to the working group.

ROFTA results were only available for 2009 and 2010, with both being assigned a red traffic light. CR/BER ratio results were not available for any year. Similar to ROFTA, average wages per FTEs were only available for 2009 and 2010, with both being assigned a red traffic light. GVA as % of income results were not available for any year. Although the results for this segment are limited, all indicators point to imbalance between the fleet and opportunities from an economic and social sense. Similar to the Bulgarian fleet, these indicators certainly suggest a deteriorating situation, however data quality is again a potential issue here.

### **7.4.4 Denmark**

The Danish fleet segments of special interest are the demersal trawl and seine 12-18m and over 40m. Danish demersal trawlers are subject to cod recovery effort restrictions.

Estimates of profits forgone for the 12-18m segment were all assigned a red traffic light, regardless of the assumption relating to days at sea or capital malleability. ROFTA results were assigned red traffic lights in 2008 and 2009 and a green light in 2010. Average wages per FTE and GVA as a % of income were assigned green traffic lights for all years with the exception of average wage per FTE in 2009, which was given an amber light.

In terms of overall evaluation, this fleet presents a mixed picture. There is therefore no real indication of any over-capacity based on the indicators presented for 2010, although this may not have been the case in earlier years when economic returns were negative. Foregone profit estimates suggest that a high degree of vessel under utilisation existed in 2010 and therefore foregone profits could be reduced with a smaller size of fleet.

For the over 40m segment, estimates of profits foregone were assigned a green traffic light for the top vessel non malleability assumption, and a amber traffic lights for all the others in 2009. ROFTA, CR/BER, Average wage per FTE and GVA as % of income estimates were both assigned green traffic lights for all years. The data therefore suggests that there is no real of overcapacity in this segment, although profits foregone estimates for 2010 suggest an improvement in the technical utilisation rate of the segment would reduce foregone profits.

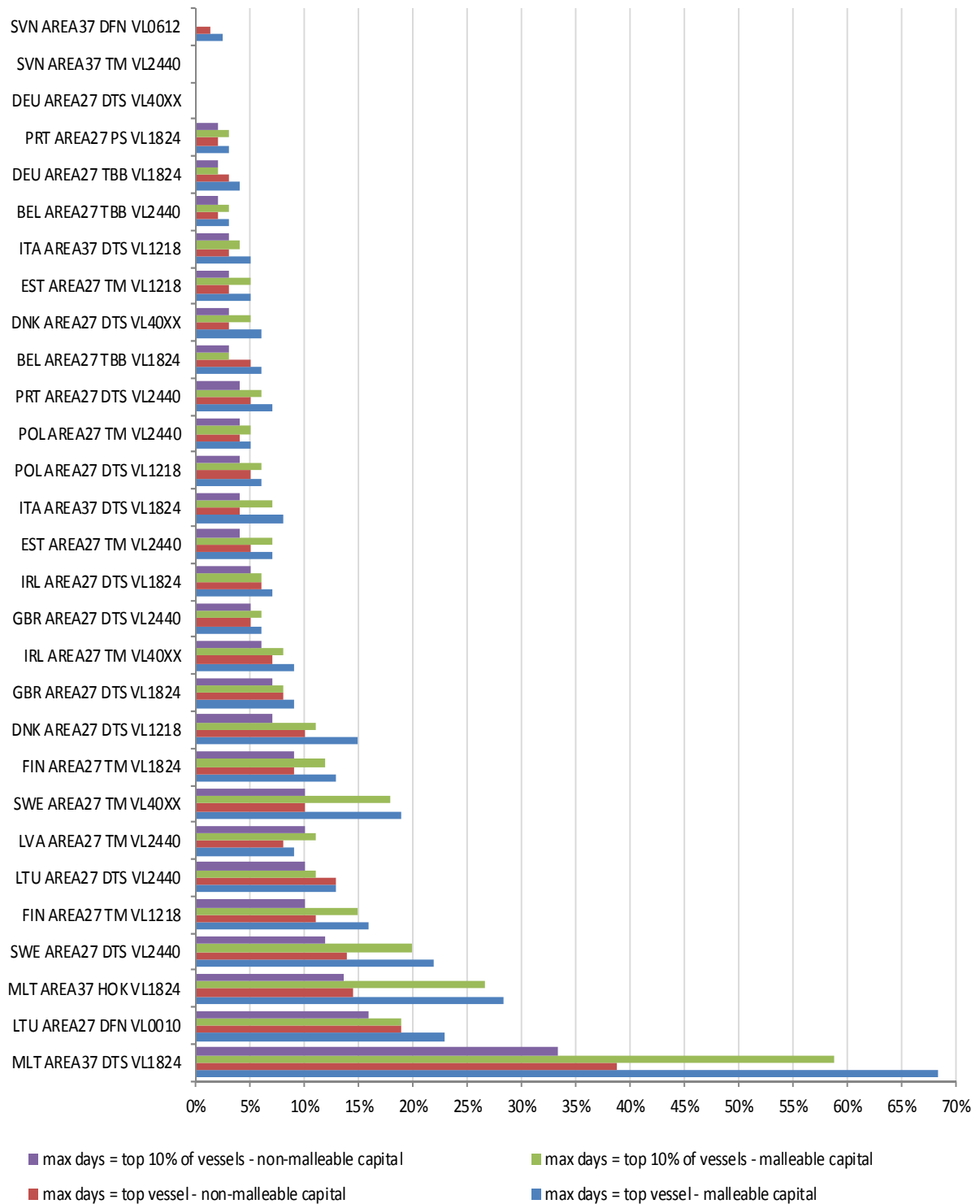


Figure 7.1: Profits (as % of income) foregone from fleet technical under-utilisation in 2010  
(Source: EU Member States DCF data submissions)

#### **7.4.5 Estonia**

Maximum days at sea of the Estonian fleet segments depend largely on weather conditions (e.g. thickness and extent of sea ice, storms) and vary between years. There is also a ban on trawl fishing during the spring spawning season. The segments analysed are pelagic trawl 12-18m and 24-40m.

For the 12-18m segment, estimates of profits forgone were assigned a green traffic light under the fixed capital assumption and an amber traffic light under the variable capital assumption. The ROFTA and CR/BER indicators were assigned a red traffic light in 2008 and 2009 and a green traffic light in 2010. Average crew wage per FTE was assigned as an amber traffic light in all years, while GVA as a % of income was assigned an amber light in 2009 (green lights were assigned in 2008 and 2010). There is no clear indication of any over capacity for this segment, and it appears that the return on capital invested improved in 2010 compared to previous years.

For the 24-40m segment, estimates of profits forgone were assigned amber lights with the exception of the top 10% fixed capital assumption, which was assigned a green light. ROFTA, CR/BER and both social indicators were assigned green lights for all years. There is no clear indication of any over capacity for this segment, and the data suggests that the return on capital invested consistently exceeded the opportunity cost of capital, an indication of potential under-capitalisation.

#### **7.4.6 Finland**

For this analysis the pelagic trawl 12-18m and 18-24m segments were considered. It is difficult to estimate theoretical maximum days at sea due to the large variation of ice conditions yearly in different geographical areas in Baltic Sea near Finnish coasts.

For the 12-18m segment, estimates of profits forgone all resulted in red traffic lights, regardless of the days at sea and capital malleability assumption. Results for both ROFTA and CR/BER were assigned a red light in 2009 and green lights in 2008 and 2010. Average wage per FTE and GVA as a % of income indicators were assigned green lights over the time series, except for average wage per FTE in 2010 which was assigned an amber light. Economic indicator results are variable so no clear indication of any under or over capitalisation. Foregone profit indicators all suggest the fleet is not fully utilised and therefore foregone profits could be lower with a smaller fleet.

For the 18-24m segment, estimates of profits forgone are assigned red lights under the variable capital assumption and amber lights under the fixed capital assumption. Results for ROFTA, CR/BER, Average wage per FTE and GVA as % of income were all assigned green lights for all years under investigation. There are no signs of over-capacity within this segment, indeed, the balance indicators suggest under-capitalisation. Foregone profit estimates suggest the fleet is not fully utilised and therefore foregone profits could be lower with a smaller fleet.

#### **7.4.7 France**

It was not possible to calculate profits foregone for the French demersal trawl and seine 18-24m and 24-40m segments as no data on maximum days at sea were available to the working group.

For the 18-24m segment, ROFTA for 2008 was assigned a red traffic light, for 2009 was unavailable, and for 2010 was assigned a green light. The same applies to CR/BER, which was also assigned a green light in 2009. Average crew wage per FTE were all assigned green lights while GVA as a % of income were all

assigned amber lights. A mixed picture for both economic and social indicators does not allow any conclusions on extent of balance.

For the 24-40m segment, ROFTAs for 2008 and 2010 were assigned red lights, while for 2009 the indicator was unavailable. The same applies to the results for the CR/BER ratio. Average crew wages per FTE were all assigned green lights while GVA as a % of income were all assigned amber lights. A mixed picture for both economic and social indicators does not allow any conclusions on extent of balance.

#### **7.4.8 Germany**

The German fleet segments of interest for this analysis are demersal trawl and seine over 40m and beam trawl 12-18m.

For the demersal trawl and seine over 40m segment, all forgone profit estimates were assigned green traffic lights. For the ROFTA and CR/BER indicators, red lights are observed for 2008 and 2009, followed by a green light in 2010. Average wage per FTE indicators were assigned green lights for all years while for the GVA as % of income indicator, 2008 and 2009 results were assigned amber lights while the 2010 result was assigned a green light. The data does not provide any clear trends of fleet overcapacity. We observed poor returns on invested capital in 2008 and 2009 with a significant improvement in 2010. Green lights for foregone profits estimates suggest fleet close to full utilisation.

For the beam trawl 12-18m segment, all forgone profit estimates, ROFTA, CR/BER, average wage per FTE and GVA as % of income indicators were all assigned green traffic lights in all years. There is no indication of fleet overcapacity. Indicator results suggest potential under-capitalisation. Foregone profits estimates suggest fleet close to full utilisation.

#### **7.4.9 Ireland**

The Irish fleet segments of interest are the demersal trawl and seine 18-24m and pelagic trawl over 40m segments.

For the demersal trawl and seine 18-24m segment, all forgone profit estimates were assigned amber traffic lights. Both ROFTA and CR/BER indicator result were assigned amber lights in 2008 and red lights in 2009 and 2010. Indicator results for average crew share per FTE and GVA as % of income were assigned amber lights for all years. Data suggests poor or negative returns on invested capital with potential over capitalisation if trend continues. Foregone profits estimates suggest fleet not quite fully utilised in a technical sense and profits foregone could be lower.

For the pelagic trawl over 40m segment, all forgone profit estimates were assigned amber lights. For ROFTA, 2008 and 2009 results were assigned amber lights and the 2010 result was assigned a green light. For the CR/BER indicator, 2008 and 2009 results were assigned red traffic lights and 2010 was assigned a green light. Indicator results for average crew share per FTE and GVA as % of income were assigned green lights for all years. A deterioration in return on capital invested, although wages and contribution to the economy remain above average. Foregone profits estimates suggest fleet not quite fully utilised in a technical sense and profits foregone could be lower.

#### **7.4.10 Italy**

In 2010, all Italian demersal trawlers operating in the Mediterranean were subject to a time closure, which consisted of 30 days + 8 Fridays following the time closure. This suspension is binding. Most Mediterranean fisheries are regulated through the use of an effort regime based on seasonal withdrawal. The segments looked in this analysis are the demersal trawl and seine 12-18m and 18-24m.

For the 12-18m segment, foregone profit estimates were assigned green lights except for the top vessel – malleable capital assumption which was assigned an amber light. ROFTA and CR/BER indicators were assigned green lights for all years. Average crew wage per FTEs were assigned green lights for the years 2009 and 2010 and an amber light for 2008. The GVA as a proportion of income indicator was assigned a green traffic light for all years. There is no indication of fleet overcapacity. Indicator results suggest potential under-capitalisation. Foregone profits estimates suggest fleet close to full utilisation.

Similarly, for the 18-24m segment, foregone profit estimates were assigned green traffic lights under the non-malleable capital assumption and amber lights under the malleable capital assumption. The ROFTA, CR/BER, average crew wage per FTEs and GVA as % of income indicators were all assigned green lights for all years. There is no indication of fleet overcapacity. Indicator results suggest potential under-capitalisation. Foregone profits estimates suggest fleet close to full utilisation.

#### **7.4.11 Latvia**

Maximum days at sea for each fleet segment are defined by Latvian national legislation. The fleet segment chosen for this analysis is the pelagic trawl 24-40m.

Foregone profit estimates for this segment were either assigned amber lights under the top vessel maximum days at sea approach or assigned red lights under the top 10% of vessels maximum days at sea approach. ROFTA, Average crew wage per FTE and GVA as % of income indicators were all assigned green lights for all years under investigation. The CR/BER indicator was assigned a red light in 2008 and a green light in 2009 and 2010. No real suggestion of any fleet overcapacity, although foregone profits estimates suggest fleet is somewhat under-utilised, indicating that foregone profits could be lower with fewer vessels.

#### **7.4.12 Lithuania**

The two fleet segments with sufficient data for the analysis in Lithuanian fleet are drift and fixed nets 0-10m and demersal trawl and seines 24-40m.

For the drift and fixed nets 0-10m segment, active in the coastal <20 m isobathic deep, the technical efficiency rate was around 20-34%. Most of the vessels stop fishing during the summer time for the tourist season. The winter fishing season is also restricted by the weather or ice. However in some areas vessels may have the possibility to not stop fishing, hence their effort differs from the average (sometimes 3-5 times higher than the average). This is why fishing days are not fully utilised during the year and estimated forgone profits were assigned a red traffic light, showing relatively high (16-23%) of foregone profit. However both ROFTA and CR/BER indicators were assigned green traffic lights in 2008 and 2009 and a red traffic light in 2010. As this fleet is operating in the coastal area and has comparatively small income, the average wage per FTE indicator is very low and was assigned a red light in 2008 and 2009 with an improvement in 2010 then the indicator was a bit higher than in 2009 reaching the minimum wage and as a result assigned an amber light. However the GVA as a % of income indicator

was given a green light in 2008 and 2009 and decreased almost twice assigning an amber light in 2010. The capacity of the coastal fleet (<12 m. fishing within 20 m. isobathic depth) been reduced in 2008-2009 by almost twice using EFF support. No clear indication of any overcapacity within this segment, returns on capital invested appear variable. Relatively high profits foregone estimates for 2010 suggest significant degree of fleet under-utilisation, indicating that foregone profits could be lower with fewer vessels. On the other hand, this fleet has almost no quota restrictions, as the share of cod TAC is devoted to the coastal fishery (5%) annually and the fishery management changed from IQ in 2008 to open access due to pure utilisation of annual fishing opportunities.

For the demersal trawl and seines 24-40m segment the technical capacity utilisation rate is much higher (65-72%) than in the drift and fixed nets < 10 m segment. However the percentage of fixed costs is relatively higher (35%) leading to higher estimates of forgone profit, and subsequently attributed a red traffic light. This fleet is mostly targeting cod, however several vessels sometime target pelagics (sprat and herring). The ROFTA indicator shows good performance and a green light was assigned for all years. The CR/BER ratio was given a green light in 2008 and 2010 and a red light in 2009, during which revenues per vessel decreased due to falling cod prices and the overall economic situation. Both the average wage per FTE and GVA as % of income indicators were assigned green lights in 2008 and amber lights in 2009 and 2010. Declines in average personnel costs may have been a consequence of the general economic situation in the country in 2009 and 2010, during which time wages decreased significantly. The decrease in GVA may also be due to changes in the methodology and an increase in the share of fixed costs in overall cost structure. Similar to the drift and fixed nets 0-10m segment, there is no clear indication of overcapacity within this segment. Returns on capital invested vary depending on the year.

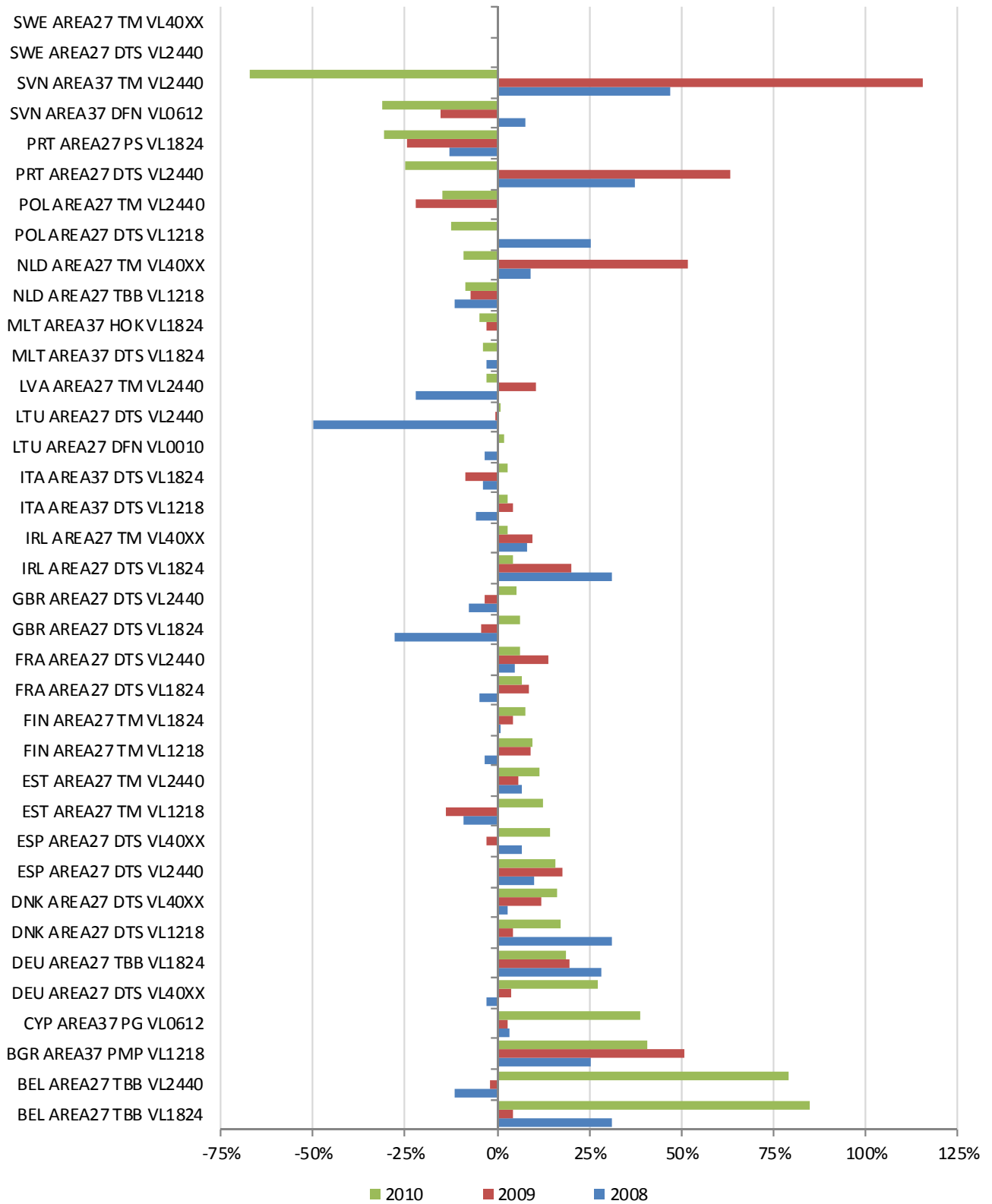


Figure 7.2: Return of fixed tangible assets (ROFTA) 2008-2010  
(Source: EU Member States DCF data submissions)



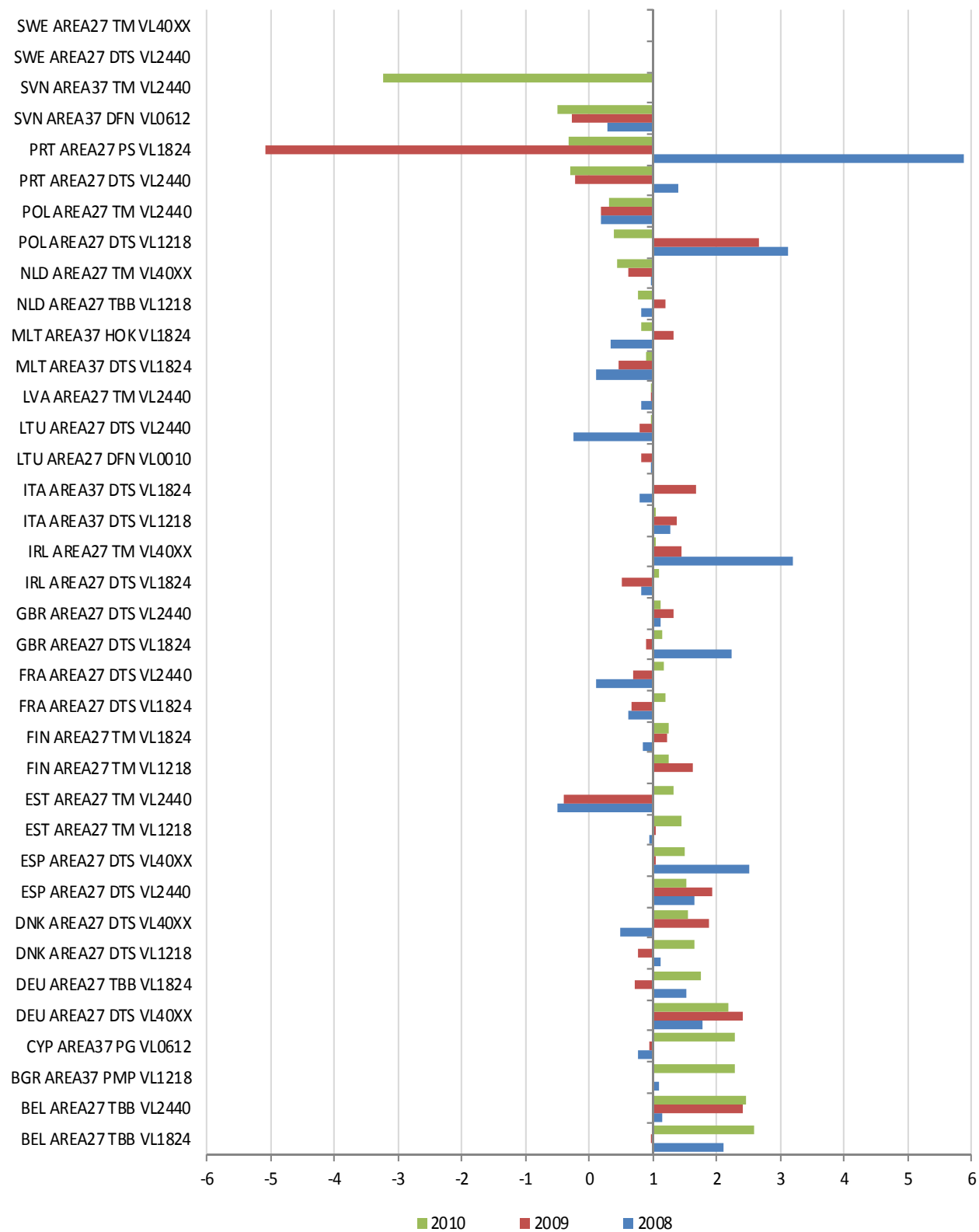


Figure 7.3: Current Revenue to Break-even revenue ratio (CR/BER) 2008-2010  
(Source: EU Member States DCF data submissions)

#### **7.4.13 Malta**

No management limitations exist with regard to the demersal trawlers, while for the hook and lines segment a management limitation is present with regard to drifting longlines gear. A closed season for two months during the year applies, however, fishers can use other hooks and lines gear all year round, such as, for example, bottom set longlines.

Estimates of profits forgone are extremely high, particularly for the demersal trawl 18-24m segment, where profits foregone as a proportion of income are 68% under the top vessel and malleable capital assumption. Under all assumptions this indicator shows red for both fleet segments analysed, raising question marks as to whether the technical utilisation rate is correct.

The economic balance indicators (ROFTA and CR/BER) were mainly assigned red indicators for both segments, except for the demersal trawl segment in 2008 where ROFTA and CR/BER indicators were both assigned green lights. Results for the social balance indicators (average wages per FTE and GVA as % of income) are a mixture of amber and green lights. Average wages per FTE lights are mainly green, indicating that wages from fishing are above the Maltese national average. GVA as % of income are mainly amber, indicating the proportion level of GVA generated by these Maltese fleet segments are lower than the EU average.

The data suggests that both segments show signs of under-utilisation and over capitalisation, leading to the conclusion that over-capacity exists.

#### **7.4.14 Poland**

The Polish fleet segments are demersal trawl and seine 12-18m and pelagic trawl 24-40m. The activity of the demersal trawl and seine 12-18m is limited by maximum number of days allowed by the Baltic cod management plan.

For the demersal trawl and seine 12-18m segment, all forgone profit estimates were either assigned green (top 10% non-malleable capital assumption) or amber (the others) traffic lights. ROFTA, CR/BER and GVA as % of income indicators were all assigned green traffic lights for all years. The average crew wage per FTE indicators were all assigned amber traffic lights for all years. No clear signs of over-capacity for this segment, in fact economic balance indicator results suggest potential under-capitalisation. Foregone profit indicators all suggest a degree of under utilisation exists and therefore foregone profits could be reduced with a smaller size of fleet.

For the pelagic trawl 24-40m segment, forgone profit estimates were either green (under non-malleable capital assumptions) or amber (under malleable capital assumptions). ROFTA and CR/BER indicators were both assigned red lights in 2008 and green lights in 2009 and 2010. Average crew wage per FTE indicators were given amber lights in all years and GVA as % of income indicators were given amber lights in 2008 and 2010 and green lights in 2009. The data does not provide any clear trends in fleet imbalance with resource opportunities.

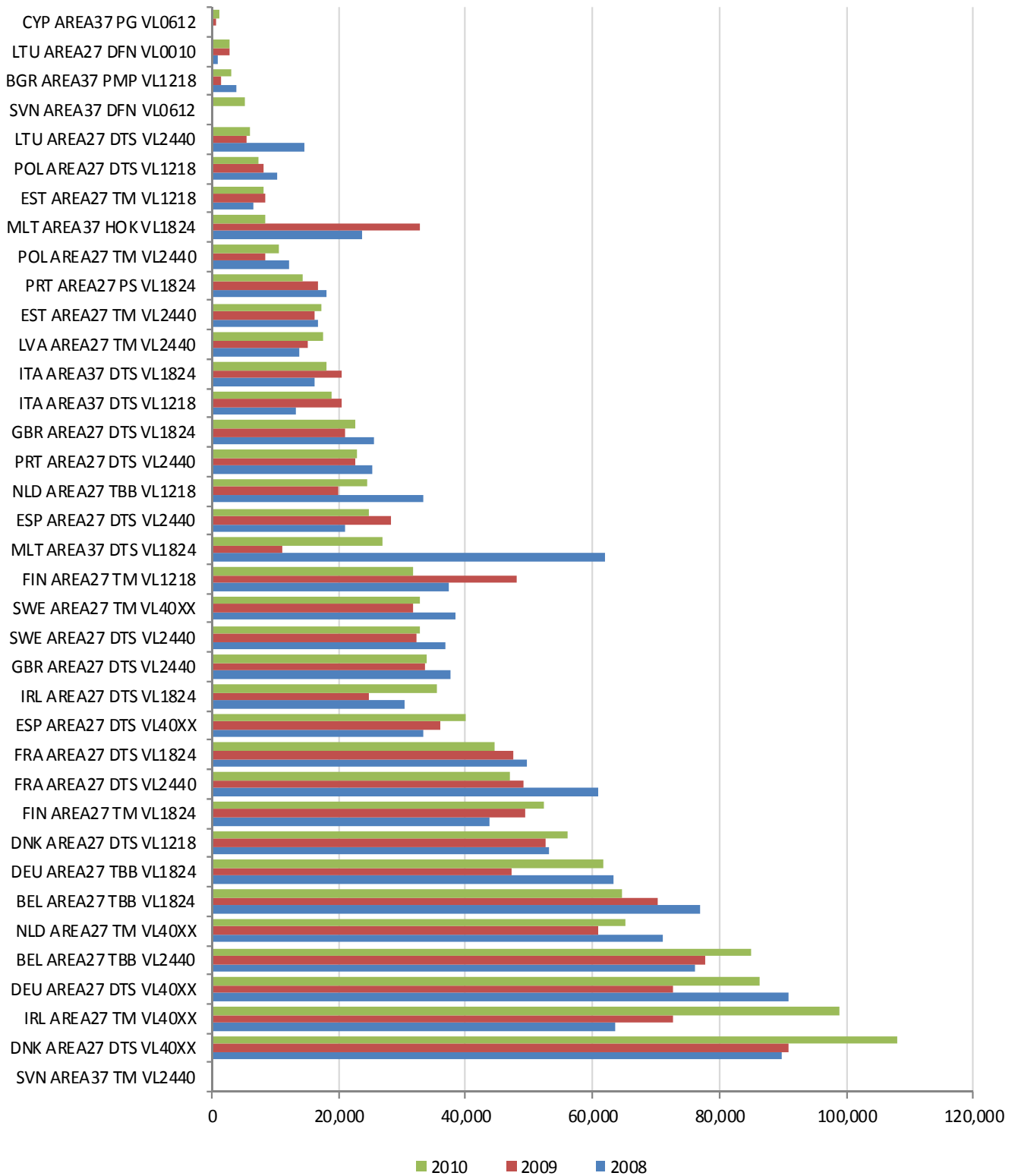


Figure 7.4: Average crew wage per FTE (2008-2010)  
(Source: EU Member States DCF data submissions)

#### **7.4.15 Portugal**

The Portuguese fleet segments of special interest are demersal trawl and seine 24-40m and purse seine 18-24m.

For the demersal trawl and seine 24-40m segment, the majority of forgone profit estimates were given amber lights for 2010 (except for top 10% maximum days at sea non-malleable capital assumption). For ROFTA and CR/BER indicators, 2008 results were assigned red lights and 2009 and 2010 were given amber lights. All average crew wage per FTE indicators were given green lights, while the GVA as % of income indicators were given amber lights in 2008 and 2010 and a green light in 2009. The data does not suggest that this fleet is over-capacity.

For the purse seine 18-24m segment, all profits forgone estimates were assigned green traffic lights for 2010. For ROFTA and the CR/BER ratio indicators, 2008 and 2010 were both given green lights, while the 2009 result was given an amber light. Average wage per FTE indicators were given amber lights in 2008 and 2009 and green lights in 2010. The GVA as % of income indicator was assigned green lights for all years. The data does not suggest that this fleet is over-capacity.

#### **7.4.16 Slovenia**

The Slovenian fleet segments are drift and fixed nets 6-12m and pelagic trawl 24-40m.

For the drift and fixed nets 6-12m segment, all estimates of profits forgone were assigned green traffic lights (could only calculate top vessel only – top 10% not available). For the ROFTA indicator, the years 2008 and 2009 were assigned green lights, while 2010 was given a red traffic light. For the CR/BER indicator, 2008 and 2010 were assigned red lights, while 2009 was assigned a green light. Average wage per FTE was only available for 2010 and was assigned a red light, while GVA as % of income was also only available for 2010 and was given an amber light. The data does not suggest that this fleet is over-capacity, although variable returns on capital invested have been experienced by this fleet.

For the pelagic trawl 24-40m, all estimates of profits forgone were given green lights for 2010 under the various different assumptions. For the ROFTA indicator, the years 2008 and 2009 were given green lights, while 2010 was given a red light. For the CR/BER indicator, 2008 and 2010 were given red lights, while 2009 was given a green light. Average wage per FTE and GVA as % of income were both only available for 2010 and were each given red traffic lights. The data does not suggest that this fleet is over-capacity, although variable returns on capital invested have been experienced by this fleet.

#### **7.4.17 Spain**

The Spanish fleet segments of special interest are demersal trawl and seine 24-40m and over 40m. It was not possible to calculate profits foregone for these segments as no data on maximum days at sea were available to the working group. In addition it was not possible to calculate ROFTA due to the lack of capital cost data.

For the demersal trawl and seine 24-40m segment, results for the CR/BER indicator were assigned green traffic lights for 2008 and 2010 and a red light in 2009. The average crew wage per FTE indicator was assigned a green light for all years, while the GVA as % of income indicator was given an amber light for 2008 and 2009 and a green light for 2010. Missing data and a mixed picture for both economic and social indicators does not allow any conclusions on extent of balance.

For the demersal trawl and seine over 40m segment, results for the CR/BER indicator were given red lights for 2008 and 2009 and an amber light for 2010. The average crew wage per FTE indicator was given amber lights in 2008 and 2010 and green lights in 2009, while the GVA as % of income indicator was assigned an amber light for all years. Missing data and a mixed picture for both economic and social indicators does not allow any conclusions on extent of balance.

#### **7.4.18 Sweden**

The cod management plan in the Baltic sea limits days at sea available to individual vessels. The Swedish fleet segments are demersal trawl and seine 24-40m and pelagic trawl over 40m.

For the demersal trawl and seine 24-40m segment, all profits forgone estimates were assigned as red traffic lights. ROFTA and CR/BER were both given red lights in 2008 and 2010 and a green light in 2009. Average wage per FTEs was given a green light in 2008 and ambers lights in 2009 and 2010. The GVA as % of income were given amber lights for all years. Although there is no clear indication of overcapacity within this segment, there are poor returns on investment in more than one year, while foregone profits estimates do indicate a significant degree of under-utilisation.

For the pelagic trawl over 40m segment, all profits forgone estimates were also assigned red traffic lights. Both ROI and CR/BER were given red traffic lights in 2008 and green traffic lights in 2009 and 2010. Average wages per FTE were assigned a green light in 2008 and amber lights in 2009 and 2010. The GVA as a % of income indicator was assigned green lights in 2008 and 2010 and an amber light in 2009. Again, although there is no clear indication of overcapacity within this segment, there are poor returns on investment in more than one year, while foregone profits estimates do indicate a significant degree of under-utilisation.

#### **7.4.19 The Netherlands**

The Dutch fleet segments of special interest are beam trawl 12-18m and pelagic trawl over 40m. Still awaiting for maximum days at sea to carry out forgone profits estimates.

For the beam trawl 12-18m segment, All ROFTA, CR/BER and GVA as % of income estimates were assigned green traffic lights. Average crew wage per FTE estimates were assigned amber lights for all years. There are no indications of overcapacity within this fleet segment.

For the pelagic trawl over 40m segment, both ROFTA and CR/BER indicators were assigned red traffic lights for all years, while average crew wage per FTE was assigned green lights for all years and GVA as % of income were assigned amber lights for all years. The data indicates consistent negative returns on investment over a three year time period, a sign of over-capitalisation and excess-capacity.

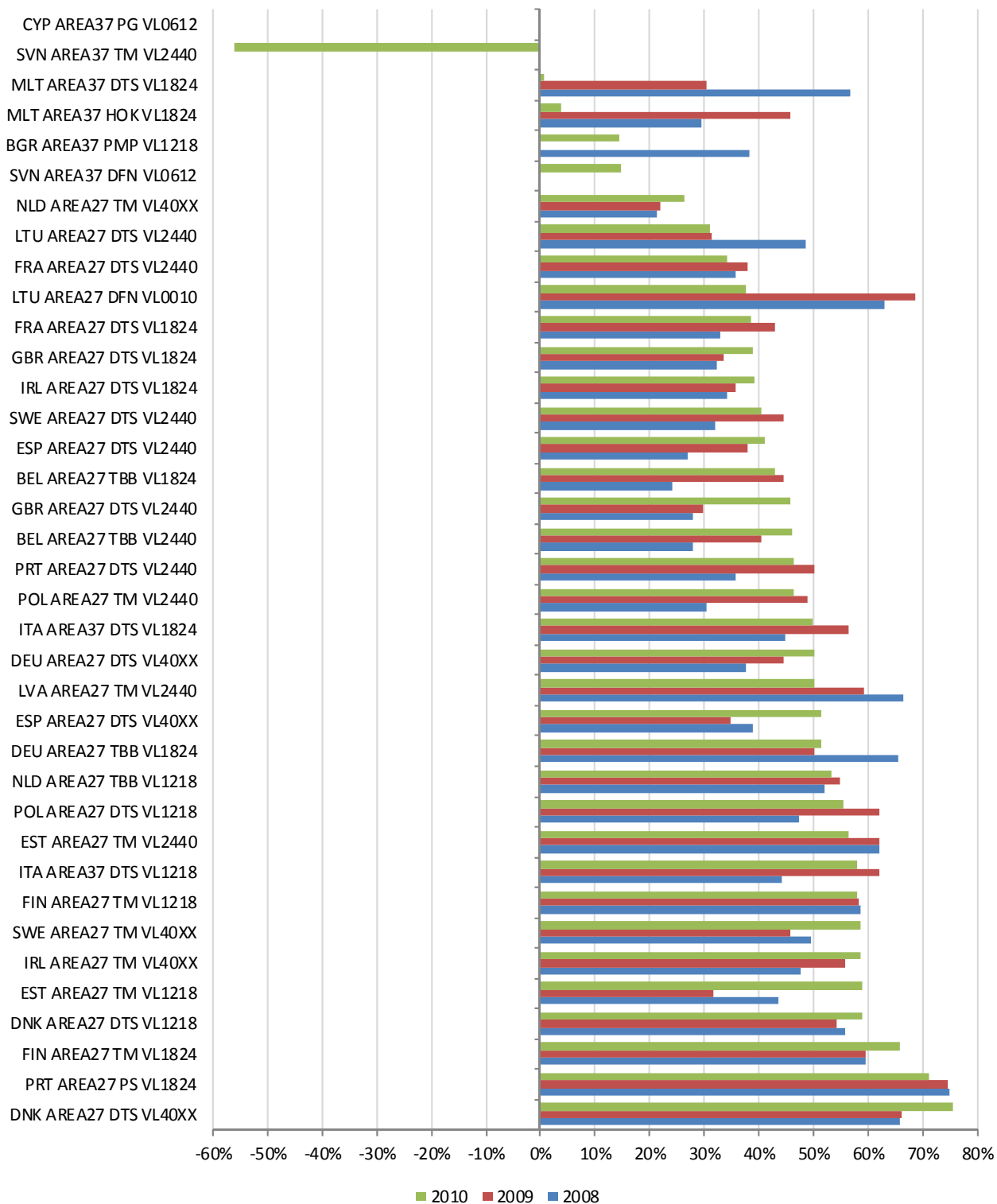


Figure 7.5 Gross Value Added (GVA) as % of Income (2008-2010)  
(Source: EU Member States DCF data submissions)

#### 7.4.20 United Kingdom

The UK fleet segments are demersal trawl and seine 18-24m and 24-40m. These fleet segments are limited in terms of fishing activity by the effort restrictions put in place in the cod recovery zone (Irish Sea, North Sea, West of Scotland) and the sole recovery zone (Western channel).

For the demersal trawl and seine 18-24m segment, all estimates of forgone profits were given amber traffic lights. ROFTA was given a red light for 2008 and green lights for 2009 and 2010. The CR/BER indicator was given an amber light for 2008 and a green light for 2009 and 2010. The average wage per FTE and GVA as % of income indicators were assigned amber lights for all years. These mixed results do not reveal over-capacity, although returns on capital invested appear volatile from one year to the next. Foregone profit estimates suggest a degree of fleet under-utilisation exists.

For the demersal trawl and seine 24-40m segment, all estimates of forgone profits were given amber traffic lights. ROFTA was given a red traffic light in 2008 and 2009 and a green traffic light in 2010. CR/BER was given a red light in 2008, an amber light in 2009 and a green light in 2010. Average wage per FTE and GVA as % of income indicators were assigned amber lights for all years. Similar to the 18-24m fleet, mixed results for this fleet do not reveal over-capacity, although returns on capital invested again appear volatile from one year to the next. Foregone profit estimates again suggest a degree of fleet under-utilisation exists.

### 7.5 Conclusions and observations

Overall, EWG 12-05 believes this combined analysis of existing economic and social balance indicators and profits foregone estimates was a useful exercise to carry out. EWG 12-05 agrees with existing STECF observations that, *“based on several assumptions and with some caveats, it is possible to make some approximate estimates of the potential value of profits that are foregone as a result of operating a fleet that is over capacity relative to its fishing opportunities”*. The EWG 12-05 believes that the foregone profits indicator would be a useful addition to the suite of balance indicators already in existence. EWG 12-05 agrees with the STECF suggestion that *“MS should consider the benefits of estimating the potential profit foregone as a result of fleet over capacity in their own country. This would inform of the potential implications of operating different sizes of fleet.”*

However, more discussion is required on the methods employed in the foregone profits calculations, particularly surrounding the issue of how to calculate maximum days at sea. Identifying the most appropriate way to calculate maximum days at sea for each segment is problematic. STECF recommended two different measures for the technical utilisation ratio. These were: a) the days at sea of the vessel with the most days in a fleet segment (i.e. is the top vessel), and b) the average days of the top 10% of vessels with the most days in the segment. However, by using observed maximum days at sea for a segment, we do not always obtain the true rate of technical utilisation, particularly when fleets are subjected to existing effort restrictions. This issue requires further reflection as it is key to estimating the foregone profits of having an under-utilised fleet.

EWG 12-05 would like to point out that the terms ‘under-utilisation’, ‘over-capitalisation’ and ‘over-capacity’ are used inter-changeably in the methodology for foregone profits devised in EWG 11-17. Assuming that an economically efficient use of a vessel coincides with a technically efficient use of the

vessel is not necessarily correct. This removes choice, the foundation of economic behaviour, from the fishing enterprise. Although it is frequently convenient to assume that profit maximisation is the goal of an enterprise, there is a trade-off between profit and other social benefits, particularly where the vessel owner is also skipper or crew member sacrificing leisure time. Thus maximisation of social benefits from a fishery may not be the same as profit maximisation. Knowing the number of vessels necessary to exploit a fishery to maximise social benefits is not straightforward and it does not follow that it is the technical minimum number of vessels needed to take the quota.

The definition of profitability varies between finance and economics. In fisheries economics, empirical observation suggests that where the management system is poor, incomplete, or lacking effective compliance procedures, profitability will generally be low. and often insufficient to cover the depreciation in the economic potential of a vessel. However, it will vary sometimes quite dramatically as a result of unexpected changes in stock abundance, location or a sharp and unexpected rise in costs. It will also vary following decommissioning schemes where there are insufficient disincentives to deter fishermen or vessel owners to return to the sector.. Where the management regime is effective, profitability should be a requisite. In other words, without an effective management regime which addresses the market failure which causes overcapacity, profitability will always tend to zero, albeit temporarily changed by natural and administrative causes but profitability will also tend to zero in unmanaged fisheries where there is no overfishing.

This exercise again highlights questionable data results for some MS. The indicator results are only as good as the data that are used in the calculations. Some indicators have produced results that do not conform with normal indicator boundaries, suggesting that some Member States data needs more thorough quality validation before being submitted through the DCF framework.

The use of target reference points for the social balance indicators were chosen pragmatically by the experts and are not suggested to be the most appropriate for each MS

The ROFTA balance indicators for the selected fleets show substantial differences between fleets and equally high volatility from year to year. This of course reflects the characteristics of an industry hunting a wild resource which has considerable quantitative and spatial variability. However, it is clear that some of the data are suspect, and the more extreme results should be treated with caution.

With respect to the capital malleability assumptions for the profits foregone estimates, under the malleable capital assumption we assume that we can immediately remove the excess fixed costs (vessels) from the segment, which is rather unlikely. Under the non-malleable capital assumption, vessels cannot just be readily sold out of the fleet, which means that the gain in profit from removing the excess fixed costs is lower. This is more realistic and a more appropriate assumption moving forward.

A fleet with a relatively low technical utilisation rate can still be profitable overall and make a good return on investment. This is due to a number of factors including the makeup of the fleet, the restrictions imposed on the fleet, the cost structure of the fleet, prices obtained by the fleet, the capital value of the fleet, etc. The example of the UK pelagic fleet shows that some fleets that are only used for relatively short period of time can still be highly profitable and make a good return on investment, with high wages for their crew.



Finally, EWG 12-05 would also like to echo previous STECF comments that “balance or imbalance itself cannot be measured or given a quantitative value. Therefore, while qualitative, verbal assessments of the degree of balance or imbalance are useful (when based on evidence) it is not feasible to give a quantitative assessment of balance (or imbalance) between fleet capacity and fishing opportunity”. Care should be taken to avoid simply using an estimate of foregone profits in relation to income as an approximation for the extent of overcapacity within a fleet segment. However, however, when results are evaluated alongside existing balance indicators, an overall qualitative evaluation of the extent of over- or under-capacity should be achievable.

## **7.6 Methodology for estimation of foregone profits (taken from EWG 11-17)**

Some MS have fleets with many vessels which are occupied much less than technically possible during each year, creating both technical and economic inefficiency. The following method, devised by STECF EWG 11-17, estimates profits that could be forgone as a result of this technical under-utilisation. The method outlines the existence of a technically fully utilised fleet and calculates the profits forgone by removing some of the fixed costs of from the under-utilised fleet.

This estimation of foregone profits is not equivalent to saying that scrapping part of the fleet equivalent to the corresponding overcapacity will give the equivalent gain in the short to medium term since the capital bound to the vessels is considered to be non-malleable.

A simple way of calculating the short and medium term yearly gain that could be achieved as a result of scrapping all superfluous vessels (with an assumed non-malleable fleet) is presented.

In addition, the possible social consequences that may arise from scrapping a large part of the fleet are discussed and uncertainties in the calculations are pointed out.

It should be noted that the calculation assumes that stocks, quotas and fish prices are constant. If these parameters are to be considered as variable, then bio-economic modelling would be a more suitable approach to take, for example the EIAA or FISHRENT model that is able to project the impacts of changing stock, quotas and prices and at the same time can estimate the forgone profit of an efficient fleet.

It is possible to make an approximate estimate of the profit that is forgone as a result of having a fleet which is over the required capacity.

It should however be pointed out that the estimated gain resulting from decommissioning or removing vessels implies more assumptions and is therefore more uncertain.

Furthermore, it should be noted that neither approach takes into account the upstream and downstream businesses that will be affected by a reduction in vessel numbers, but only considers the forgone profits of the fleets.

By using this approach, MS can obtain rough estimates of profits that have been forgone as a result of having an overcapacity fleet.

More interestingly, the approach below also gives a rough estimate of the potential gain in profits that might, in due course, result from scrapping superfluous vessels, subject to assumptions about malleability of capital invested in vessels.

### **7.6.1 Foregone profits estimation procedure**

**Step 1:** The technical indicator calculated yearly by MS as part of their report on efforts to achieve balance between fleet capacity and fishing opportunities (following the guidelines on balance indicators [Version 1 March 2008]) is a starting point for measuring technical inefficiency. It is calculated by

dividing the average actual number of days at sea per vessel by the maximum number of days at sea per vessel. Subtracting this ratio from 1 tells us what proportion of the fleet segment was technically not required for the volume of fish landed.

**Step 2:** The ratio derived in Step 1 is then applied to the Capital Cost (depreciation and interests - to be calculated by MS) and fixed costs of the underutilised fleet (see Commission Decision (EC) 93/2010) for the calculation of annual depreciation).

**Step 3:** The estimated annual net profit for the efficient (appropriate capacity) fleet is calculated by subtracting crew costs, energy costs, repair and maintenance costs, variable costs, fixed costs and capital costs for the efficient fleet derived from Step 2 above from the value of landings\*.

**Step 4:** The profit for the inefficient (over capacity) fleet is also calculated by subtracting crew costs, energy costs, repair and maintenance costs variable costs, fixed costs and capital costs for the inefficient fleet from the value of landings\*.

**Step 5:** Foregone profit is equal to the difference between the profit of the efficient (appropriate capacity) fleet and the profit of the inefficient (over capacity) fleet.

This approach provides a simplistic picture of the profit that is, in theory, forgone as a result of having an inefficient (over capacity) fleet. However, another interesting question for MS is the gain in profit they can expect by moving towards an efficient fleet, for example by scrapping vessels or otherwise reducing vessel numbers (assuming that the fishing opportunity does not increase and thereby achieve balance). Assuming a fleet with malleable capital, such that vessels could readily be sold out of the fleet, the gain in fleet profit by decommissioning vessels to an amount that removes overcapacity will be the same as above. However, as discussed below, a more appropriate assumption is that the capital of fishing fleets is non-malleable, and vessels cannot just be readily sold out of the fleet, which means that the gain in profit would be lower. Assuming a depreciation period of 30 years<sup>1</sup> and a fleet where the ages of the vessels are evenly distributed among the years, the yearly gain (over the next 30 years) from removing vessels corresponding to the overcapacity will be the difference in fixed cost between the efficient (appropriate capacity) and inefficient (over capacity) fleets plus the average of 1/30 of the difference in capital costs the first year, 2/30 of the difference in capital costs the second year etc.

Disregarding inflation and acknowledging the already made assumptions, this estimation is approximated to:

$$\text{Gain in profit} = \text{difference in fixed costs} + \frac{1}{2} * (\text{difference in capital cost}).$$

---

<sup>1</sup> It should be noted that the 30 year write-off period relates to the economic earning capacity of the vessel. This will generally be a much longer period than that used by accountants and permitted by MS tax authorities in drawing up the accounts of fishing enterprises.

The assumption that half the overcapacity of the fleets could be re-allocated to other uses is arguable but it is inappropriate to attempt to change the assumption here.

In the under-utilised (over capacity) fleet:

(A) Actual number of days at sea per vessel	200
(B) Max no. of days at sea per vessel (at fleet segment level)	300
(C) Technical efficiency rate (A/B)	0.67

Table 7.3 Example estimation of profit achieved by fleet with excess capacity and potential profit that could be achieved by a smaller fleet

	Under-utilised fleet	Fully-utilised fleet non-malleable capital	Fully-utilised fleet non- malleable capital
	currency units	currency units	currency units
Revenue	1000	1000	1000
Crew costs	300	300	300
Energy Costs	100	100	100
Repair and maintenance Costs	100	100	100
Variable Costs	100	100	100
Fixed costs	150	100	100
Capital costs	150	100	125
Profit	100	200	175
Value Added	400	500	475

In the above example, the profits forgone as a result of operating an over-capacity fleet with a technical efficiency rate of 67%, assuming malleable capital, is 100 currency units. Assuming non-malleable capital, the foregone profit is 75 currency units.

### 7.6.2 Data requirements:

Capital costs (depreciation and interests) for each fleet segment. The depreciation is a requirement under DCF (Commission Decision (EC) 93/2010). MS should estimate interest costs using the method detailed in the STECF EWG 11-04 report. Actual days at sea for each fleet segment. This is a requirement for DCF.

Maximum possible days at sea for each segment.

### 7.6.3 Limitations and considerations

EWG 11-10 suggests that this is a *practical* way to measure the technical inefficiency based on the *maximum number of days* instead of using traditional quantitative approaches such as Stochastic Production Frontier (SPF) or Data Envelopment Analysis (DEA) aimed to estimate the production frontier of the fully efficient firms. Although this approach is limited by the fact that it considers only one variable, it is easy to understand and apply by MS.

#### **7.6.4 Short and long term implications**

Inefficiency (in terms of fleet size in relation to fishing opportunity) can be caused by a temporary excess of fleet capacity or by a persistent problem of overcapacity. Even if these two situations have different consequences, both will lead to lost efficiency in the short term. Using the same reasoning, a fully efficient fleet without overcapacity may lead to forgone profit, if the fishing opportunities increase and the quotas can no longer be fully utilised. That would be profit foregone as a result of an under-capacity fleet.

#### **7.6.5 A constant approach**

The suggested estimation of profit forgone as a result of excess fleet capacity assumes stocks, management regulations and cost structures remain constant. Since we estimated over a period of 30 years, this assumption is clearly not likely to be realised. In addition, longer term implications require the inclusion of other possible factors which may affect efficiency, such as technological progress, social equity problems and inflation rates. Some of the expert group suggest that, because of unrealistic assumptions, it is not valid or useful to extend this estimation of effects for so long a time period as 30 years. However, in practice, because of the potential for sharp technological changes a time horizon of five to ten years is appropriate so the question of how to comprehend future changes over a thirty year period does not arise. In the face of uncertainty it is usually the case that the best forecast of the future is the present position and hence the assumption of constancy is sound.

#### **7.6.6 Theoretical versus actual maximum days at sea:**

The maximum possible days at sea can be estimated based on two approaches. The actual maximum achieved days at sea are based on real data and the theoretical maximum days at sea are based on the maximum theoretical possible amount of days at sea. Based on SGBRE 10-01, it is suggested that the theoretical maximum number of days at sea should be calculated as 365 days minus the days that the MS considers that the fleet will not use for social, technical and/or other reasons. These reasons could be weekends, holidays, days to repair and maintain the vessel and weather conditions that make fishing unprofitable or unsafe to fish. The actual maximum days at sea is based on the vessel or groups of vessels in a segment that has the highest days at sea in a year during a given time period. This is only an appropriate way of estimating the maximum days at sea, if the segment is not restricted by any effort regulations.

#### **7.6.7 Value added versus profit**

The method of estimation presented above is based on the value added approach. It considers not only the fishermen's profit, but also counts the value of the fishermen's salary as a value added to society. The salary benefits both the MS through taxes and also gives more purchasing power to the society. The value added is therefore the proxy for the resource rent of the society and is also presented along with the profit.

Whether profit or value added is used, keeping everything else constant, the profit forgone as a result of operating an inefficient (over capacity) fleet is the same. In the theoretical estimation of the forgone profit resulting from overcapacity, the crew cost is not assumed to change.

#### **7.6.8 Transition issues**

Scrapping or removing vessels in order to reduce total depreciation costs means that some costs and delays need to be taken into consideration. As fishing vessels are often non-malleable capital, the possibility to resell the vessel or use it for another purpose can be very limited or non-existent, especially in the context of overcapacity. Therefore, there are very few opportunities to disinvest the capital and owners may be reluctant to scrap their vessels.

In the intermediate term, crew, maintenance and repair costs will be higher if the utilisation of remaining vessels is to be increased. This is because of greater wear and tear of equipment and potentially higher wages for longer shifts. On the other hand, the vessels that have left the fleet will now not have any crew, maintenance and repair costs. It is hard to say whether the total crew, repair and maintenance costs will decrease or increase when some vessels leave the fleet and others spent more days at sea. In this estimation, it is assumed that the total repair and maintenance costs will remain the same.

In the longer term, the way to handle the issue of inactive vessels would have to be considered. At the moment, they can be analysed using the same setting as the active vessels, giving two alternative measures of foregone profits, with and without inactive vessels. Thus, inactive vessels would be considered as vessels with a technical efficiency of zero, and any depreciation costs and/or interest costs considered as foregone profits.

Future developments in the abundance of target stocks would also need to be considered, taking into account stocks affected by recovery plans for example.

#### **7.6.9 Distribution issues**

Following this approach, higher efficiency may mean a reduction of the size of crews and redistribution between capital gains and crew wages, depending on the initial level of technical inefficiency and the concentration of the ownership of the vessels.

Geographical impact of higher efficiency will be very different depending on fishing patterns, as concentration of activities in fewer vessels may affect the communities in the ports of origin.

Social issues should also be considered, especially working conditions and impact on ancillary industries. The suppliers for vessels (repair, inputs etc.) could also be affected.

In some areas income from part time jobs in fisheries is complementary to other sources of income, and therefore a concentration of economic activities may affect a wider part of the population.

### **7.7 Methodology for calculating economic and social balance indicators**

This section describes the methods used to calculate both the economic and social balance indicators laid down in the guidelines for an improved analysis of the balance between fishing capacity and fishing opportunities. The guidelines contain the following indicators:

One technical balance indicator (capacity utilisation (average days at sea / maximum days at sea),

Three biological balance indicators (Ratio between F estimated and F target (F/Tt), Ratio between current catch weight and stock biomass, and CPUE)

Two economic balance indicators (return on investment (ROI) and the current revenue / break even revenue ratio (CR/BER), see 7.3.1 and 7.3.2

Two social balance indicators (Crew wages per FTE and Gross value added (GVA) as a proportion of income, see 7.3.3 and 7.3.4

As we are focusing on fleet capacity from an economic perspective, the three biological balance indicators are outside the scope of our study, while we have already discussed the technical indicator which has been used in the calculation of foregone profits, see sections 7.2.1 and 7.2.6. The following sections the economic and social balance indicators.

### **7.7.1 Return on Investment (ROI)**

The return on investment (ROI) measures profits in relation to capital invested. The formula for ROI is as follows:

$$ROI = (Net\ profit + opportunity\ cost\ of\ capital) / Capital\ asset\ value$$

Where:

*Net profit = (Income from landings + other income) – (crew costs + unpaid labour + energy costs + repair and maintenance costs + other variable costs + non variable costs + depreciation + opportunity cost of capital)*

Where:

$$Opportunity\ cost\ of\ capital = Real\ interest * Capital\ asset\ value$$

Where:

$$Real\ interest\ (r) = [(1+i)/(1+\pi)]-1$$

Where  $i$  is the nominal interest rate of the MS in the year concerned and  $\pi$  is the inflation rate of the MS in the year concerned.

And where:

$$Capital\ asset\ value = Vessel\ replacement\ value + estimated\ value\ of\ fishing\ rights$$

Results greater than zero but lower than the target reference point (TRP) (return received from investing capital value elsewhere i.e. low risk long term government bonds) suggest that normal returns are being generated. Results greater than the TRP suggest that extraordinary profits (that is profits above the opportunity costs) are being generated, a sign of economic under-capitalisation. Results below zero suggest negative returns and indicate economic over-capitalisation. However, results on a vessel-by-vessel analysis can be very variable.

As data on intangible assets were not available for all MS, the Return on Fixed Tangible Assets (ROFTA) was calculated as an approximation of ROI. The calculation of ROFTA uses exactly the same calculation method but without including the value of fishing rights

### 7.7.2 Current revenue break even revenue ratio

The ratio between the current revenue and the break-even revenue (CR/BER) can show either the short term profitability of a fleet segment or provide an indication of the extent of over or under capitalisation within a fleet segment, depending on the length of time series available and also whether capital costs are included in the calculation. If there is a time series at least 3 years and capital costs are included in the calculations then results can provide an indication of the extent of over or under capitalisation. The formula is as follows:

$$BER = (Fixed\ Costs) / (1 - [Variable\ costs / Current\ Revenue])$$

Where:

*Variable costs = Crew costs + Unpaid labour + Energy costs + Repair and Maintenance costs + other variable costs*

And where:

*Fixed costs = Non variable costs + depreciation + opportunity cost of capital*

The ratio is calculated by dividing the current revenue by the BER i.e.

$$Ratio = Current\ Revenue\ (CR) / BER$$

Under this scenario, if the ratio is greater than 1, then enough revenue is generated to cover fixed and capital costs, indicating that the segment is economically viable. Conversely, if the ratio is less than 1, insufficient income is generated to cover fixed and capital costs, indicating that the segment is economically unviable.

### 7.7.3 Crew wages per FTE

The average personnel cost per full-time equivalent job should be interpreted to mean average remuneration before tax per FTE job. Based on the DCF, total personnel costs are crew costs and the value of unpaid labour, while FTEs are *national* FTEs. There are several remuneration systems e.g. crew share, fixed wages etc. This indicator shows whether the fishing industry is paying a good wage to workers.

Average personnel costs per full-time equivalent crew job should then be compared to average or minimum full-time wages in the MS. The indicator is defined as:

$$Total\ personnel\ costs / full\ time\ equivalent\ jobs\ (FTEs)$$

Where



*Total personnel costs = crew costs + unpaid labour value*

All data for this calculation should be available under the Member States DCF national programmes. If crew members are supplied by agency, and the vessel business pays the agency, then this indicator becomes difficult to estimate as the vessel owner does not necessarily know the amount received by the crew members. In such cases, the MS will have to devise a reasonable way to estimate, which may include collecting data or information from crew agencies and explain their method.

#### **7.7.4 Gross value added (GVA) to Income ratio**

GVA expresses the added value that the activity contributes to the national economy. The indicator may provide information on the socio-economic importance of the fishery, as economically important stocks are represented by high revenues, while the associated costs are a measure of the level of effort applied in the fishery. Setting target values for this indicator is very complicated. For the purposes of our analysis we have chosen to evaluate GVA as a proportion of income. The formula is as follows:

$$GVA / \text{income from landings} + \text{non fishing income}$$

Where:

$$GVA = (\text{Income from landings} + \text{non fishing income}) - (\text{Energy costs} - \text{repair and maintenance costs} - \text{other variable costs} - \text{fixed costs})$$

A value above zero means the fishery has a value for society. GVA can be interpreted not only as positive/negative value but also as the proportional contribution of the segment to the GVA of the national fleet (the weight of that segment in the national fishing sector).



## 8. SPECIAL CHAPTER ON FISHING RIGHTS

### 8.1 Introduction

Reform of the common fishery policy proposes implementation of Transferable Fishing Concessions (TFC), i.e. fishing rights allocated to individual fishing vessels. The objective of TFCs is to achieve an improved balance between fishing capacity and fishing opportunities through the use of market based instruments.

In theory, the introduction of TFCs should result in a more efficient and profitable fleet, whereby over time the most efficient vessels buy out the less efficient vessels. The remaining, more efficient fleet would also benefit from economies of scale. Individual rights should also motivate fishers to undertake more responsible fishing practices.

All EU Member States (MS) fleets are managed by some form or other of fishing rights, the most common being fishing licenses. However there are only a few MS (Denmark, Estonia, United Kingdom, Malta, Netherlands and Sweden) that have already introduced a TFC management system, whether Individual Transferable Quotas (ITQs) or similar. Germany and Lithuania have introduced individual fishing quotas that are not transferable.

Where ITQ (or similar) systems exist, there is a market that determines the value of fishing rights. The DCF requires MS to collect data on the value of fishing rights and trade on the leasing of those fishing rights.

The objective of this chapter of the AER is to: s are to examine the following:

- 1) Examine how the profitability of fisheries reflects the value of the resource: the resource rent
- 2) Analyse the efficiency of the quota market in relation to the size of the market
- 3) Asses the profit/rent distribution effect of the ITQ system
- 4) the dynamic impact on the fleet in capacity and profitability.

The analysis focused on the MS that have already introduced ITQs (or similar) and was based on the data provided by MS submission under the DCF. However as the data is limited, a qualitative description and examination of the fishing rights in each country is also provided.

In particular, data availability for the analysis was limited for Malta and Sweden. In Malta fishing rights are dispersed unevenly throughout different fleet segments. Therefore, it was impossible to carry out the analysis using DCF data at the fleet segment level. Examining fishing rights in the Maltese fishing fleet would require a different approach that is not feasible with the given level of data aggregation. In Sweden the ITQ market is only just developing and data on the value for fishing rights was not available for the period under investigation. Therefore, only a qualitative analysis for these two countries was possible.

## **8.2 Description of fishing right by Member State**

### **8.2.1 The Danish Quota Management System**

TFCs were introduced in the Danish pelagic fleet on the 1 January 2003. Initially, only herring was regulated through the use of ITQs. However, in 2007 mackerel and other industrial species became regulated under the same system and, consequently, the industrial fleet was included. The ITQ's were allocated using the 'grandfathering' method, where the rights were given free of charge to fishermen, using 2000-2002 as reference years.

The demersal fishery became regulated by non-transferable individual fishing rights on the 1 January 2007. Individual vessel quota shares (VQS) were distributed to all vessels generating more than €30,000 in gross earnings each year in the reference period 2003-2005, using the grandfathering method. Initially the VQS could only be transferred together with the vessel to another vessel, but this restriction was abolished after two years.

A VQS vessel less than 17 metres (with at least 80% of trips less than three days) can join a coastal fisheries scheme. An additional quota share of cod and sole is allocated to these vessels. The coastal vessels can buy quota shares from vessels over 17 meters, while vessels above 17 meters cannot buy quotas from coastal vessels.

The 'less active' vessels with gross earnings below €30,000 in the reference period continued to be managed under a 'ration' system. These vessels receive a fixed share of the national quota for the corresponding segment.

Vessels can transfer shares permanently, but can also lease limited amounts of fish within the quota year. Furthermore, fishermen can form a pool with other vessels within which the annual vessel quotas can be transferred freely, given that the fishermen earn at least 60% of income from active fishing.

### **8.2.2 ITQ of Maltese Bluefin tuna fishery**

The Bluefin tuna fishery in Malta has been managed under an IQ system. In 2009, the transferability of quotas was allowed and the system changed from IQ to ITQ. As a consequence, data on income from leasing out quota or other fishing rights, lease/rental payments for quota or other fishing rights and the value of quota and other fishing rights was collected for the first time for the year 2009.

In 2011, bluefin tuna represented the 3rd most important species for Maltese fleets in terms of landings (142 thousand tonnes), just after swordfish and common dolphinfish. In terms of value, bluefin tuna is one of the most valued species targeted by the Maltese fleets achieving an average first-sale price of €7.5 per kg in 2011.

The fleet segments involved in the bluefin tuna fisheries, include: vessels using hooks (HOK); vessels using active and passive gears (PMP) and vessels using other active gears (MGO,) each accounting for 56%, 37% and 8% of the total landings in weight, respectively.

### **8.2.3 The Dutch ITQ system**

The Dutch quota management system has developed over the past 37 years. Different methods to manage national quota have evolved for different groups of species (i.e. plaice and sole; cod and whiting; herring, mackerel and three other species). In general the development has evolved from introducing quotas (TAC) to individual quotas (IQ) and, more recently, to ITQ markets. Initially,

quotas were not allocated to vessels and the 'race to fish' situation was solved through the administrative allocation of quotas. Subsequently, rights transaction markets gradually developed, and eventually official transferable rights markets were created. Currently, well established markets for trading and renting quotas exist in Denmark.

On average, around 60% of the total volume and value of landings are individual quota fish. The most important fleet segments in the ITQ system are pelagic trawlers and beam trawlers.

For the pelagic fleet the most important ITQ's are for herring, mackerel, horse mackerel and blue whiting. The owners of the pelagic trawler fleet individually lease fish quotas between each other if necessary. Almost all the quotas are owned by active fishermen or fishing companies.

Sole and plaice are the most important ITQ's for the beam trawl fleet. Flatfish fishing rights are managed through a pooling system by (PO's) and only owners of (at least mini) quotas are allowed to rent additional quotas. It is estimated that around 25% of the flatfish quota is owned by inactive fishermen. The quotas for cod and whiting are mostly very small as they are mainly by-catch species.

#### **8.2.4 The UK Quota management system**

A system of Fixed Quota Allocations (FQAs) was introduced in the UK on the 1 January 1999. Quota allocations are based upon the FQA units associated primarily with vessel licences and licence entitlements. Vessel licences are allocated yearly. FQA units were based mainly on landings during the reference period 1994-1996.

The UK Fisheries Administrations issue quota allocations to Producers Organisations (POs), the non-sector (individual vessels, over 10m, which are not members of POs) and the under 10m fleet. Around 95% of UK quota is allocated to one of the 20 POs. For the under 10 metre fleet, quota units are managed as a common pool by the Fisheries Administrations.

There are various approaches that POs use to manage quota, for example:

- a. ITQs where each vessel can land against or trade the quota units registered against its licence
- b. a pool system where each vessel contributes into the PO pool all the quota units registered to its licence and then the pool is shared out among members for instance by monthly allocations by species to each member vessel
- c. a combination of pool plus ring-fenced quota.

Therefore, although the UK has a system of fixed quota allocation units per stock managed by quota, which can be traded either permanently (bought and sold) or in-year (leased), albeit, subject to cumbersome regulatory requirements, there are many vessels whose owners do not experience the system as an ITQ system.

In addition, in 2008 changes to the Cod Recovery Plan imposed restrictive days at sea constraints on UK vessels. Some vessels not using their single-year allowance of days were able to sell some days to other vessels. Since, more restrictive days at sea regulation has developed this trading environment.

### **8.2.5 Estonian ITQ system**

All fishing rights in Estonia are based on the historic usage principle. This means that each year the share of fishing opportunity for a company is calculated according to the catches of the previous three years. The main management measures in Estonia are volume quotas (ITQs) in the open water fisheries (both Baltic and Atlantic trawling) and gear usage quotas (ITE; individual transferable effort) in the Baltic coastal and inland fisheries. Since the NAFO distributes some fishing rights in the form of fishing days, fishing day quotas are also used in this segment. All Estonian fishing rights are fully transferable inside the country (i.e. between licence owners). In the Estonian case, ITQs can be considered an effective method for increasing the allocation of fishing rights to the most effective enterprises and speeding the process of reducing excessive fleet capacity.

The above mentioned system is implemented throughout the Estonian fishing fleet. Baltic open-sea trawling consists of two segments (pelagic trawl 12-18m and 24-40m) which target the most regulated species of the Baltic Sea – herring, sprat and cod. The Atlantic distant water fishing fleet (demersal trawl and seine over 40m) has quota for northern shrimp in the NAFO area. Other species of great commercial interest are Greenland halibut, redfish and rays.

Until 1997, the Estonian trawl fishery was regulated simply by use of national quotas. The catch history was first used as a basis for fishing rights in 1998, but there was no legislative basis for that system. It was legalized in 2000. The main objective was to “freeze” the status quo in fishing. After the establishment of IQs, in 1999–2000, the quotas were not transferable in Estonia, with the exception that if a boat was sold, it was allowed to transfer even the historical quota share with the boat. However, enterprises were allowed to rent boats from other enterprises to fish their full quota. Since 2001, the new Fishing Act allowed transfer of quotas entirely or partially, making them entirely transferable and divisible. In addition, 10 % of the total national quota began to sell by annual auction. In January 2003, the fishery quota auctions were terminated, because it allegedly increased fishermen costs.

### **8.2.6 Swedish ITQ system**

The Swedish government decided to introduce tradable fishing concessions in the Swedish Pelagic fishing fleet in June 2009. The aims of the reform were to support the structure of the fleet, to preserve the resources and secure an economically, environmentally, and socially sustainable fishing sector. The Operational Plan for the fishing industry in Sweden 2007-2013 stated that over-capacity in the pelagic fleet was at around 30%, while the industry stated that this part of the fleet should be halved to achieve international competitiveness.

The Swedish Board of Fisheries could, after detailed discussions with the industry on the 1 November 2009, present detailed implementing rules for the application of the system. At the start 81 vessels were allocated fishing rights based on historic fishing. In addition to the shares of the quota which was spread out at vessel level, there were also certain quantities allocated outside the system to coastal fisheries, primarily with yarn and smaller seiners, to strengthen the regional-based fisheries in the Baltic Sea. This part of the quota is not subject to tradability. Instead the Agency of Marine and Water Management (Board of Fisheries) holds and allocates this part either for annual individual distribution (as is the case for the regional fishing quotas) or for free fishing for those who use certain pre-specified gear types that may be used on the coast. The regional quota for herring in the Baltic Sea is about 15% of the quota in the eastern Baltic, while approximately 10% of sprat quota in the waters of the Baltic Sea is allocated for vessels which only fish in the Baltic Sea, and lands in the Baltic ports.

Initially, more than twice as much as had historically been fished was allocated to the coastal quota to enable development of this type of fishing. Utilisation of coastal quotas has in most cases gradually increased because the access to these fisheries is not limited by special permits. Coastal quotas are now related to TAC development, for example 20% of the herring quota in the Western Baltic Sea. Shares of the other coastal quotas vary between 0.5- 5.5 % of their quota.

### 8.3 Total value of fishing rights: value of resources

In this section, the total value of fishing rights and how they relate to the profitability of the fishing fleets is examined. According to theory, the value of fishing rights should reflect the net present value of fisheries profits. The value of fishing rights was compared to that of tangible fixed assets i.e. capital value, while net profits were examined against the total value of fishing rights. These analyses were carried out by MS and fleet segments.

Figure 8.1 presents the value of the fishing rights for 2008-2009. According to the data available, the United Kingdom presented the highest rights value. Danish rights were estimated at almost the same level and followed by The Netherlands. On the other hand, the value of Estonian and Maltese fishing rights are small compared to these other countries.

The value of fishing rights varies between the years analysed. In Denmark, fishing rights value increased significantly from 2008 to 2009, and is related to the fact that the fishing right markets were still developing at the time.

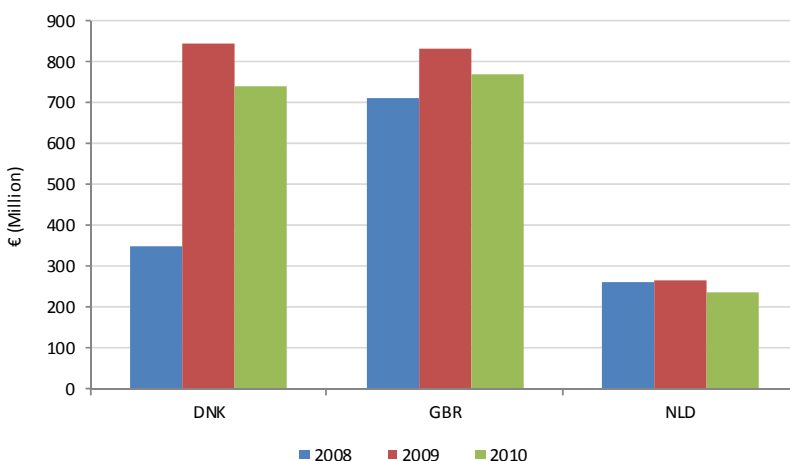


Figure 8.1 Value of fishing rights for UK, Denmark and the Netherlands 2008-2010  
(Source: EU Member States DCF data submissions)

The value of rights naturally varies between the fleet segments depending on the importance of ITQ species. For the demersal trawler segment the value of fishing rights are high compared to the value of tangibles: the fishing rights value is more than double that of tangibles. In general the value of fishing rights has increased significantly since 2008.

In Estonia, other fleet segments apart from trawlers had an insignificant fishing rights value. For trawlers the value of rights compared to tangibles was low, around 30%, implying low value of fishing rights. Therefore the return on fishing rights were high even though profitability varied considerably during the period of under analysis.

In the Dutch fleet the most important fleets in terms of fishing rights are beam trawlers, pelagic and demersal trawlers. Small scale passive gear vessels have a relatively high value of fishing rights. The value of fishing rights was higher than the tangible asset value for the major fleets with rights. For Beam trawlers 24-40m the value of rights was three times that of tangible asset value. Net profit as a proportion of fishing rights were between 10%-20% over the period analysed. Pelagic trawlers however made extensive losses.

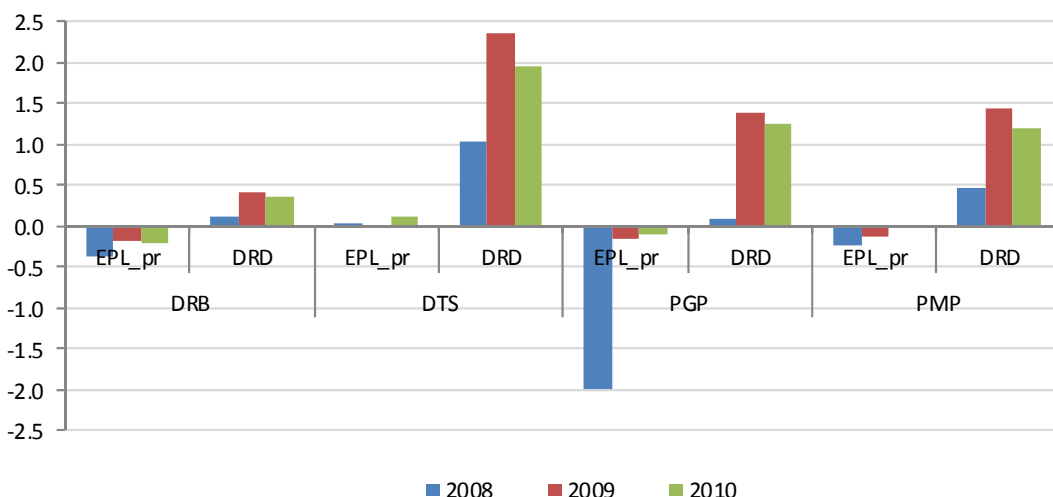


Figure 8.2 Danish net profit as a proportion of the value of fishing rights by fleet segment i.e. return on fishing rights (EPL\_pr) and value of fishing rights to value of tangible assets ratios by fleet (DRD)  
(Source: EU Member States DCF data submissions)

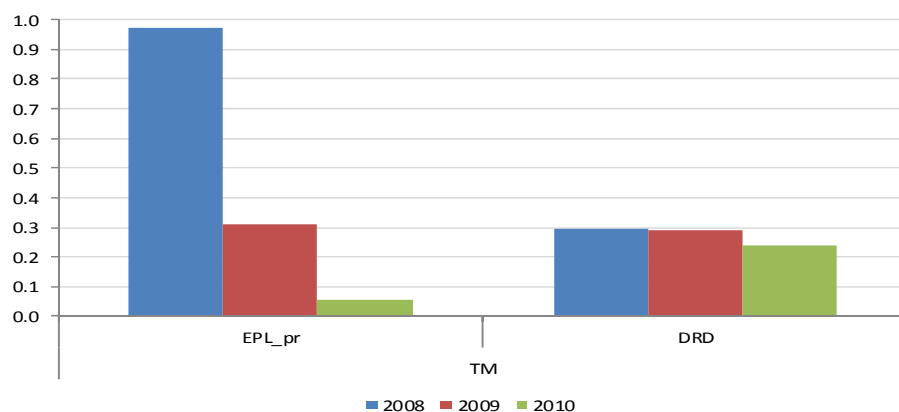


Figure 8.3 Estonian net profit as a proportion of the value of fishing rights by fleet segment i.e. return on fishing rights (EPL\_pr) and value of fishing rights to value of tangible assets ratios by fleet (DRD)  
(Source: EU Member States DCF data submissions)



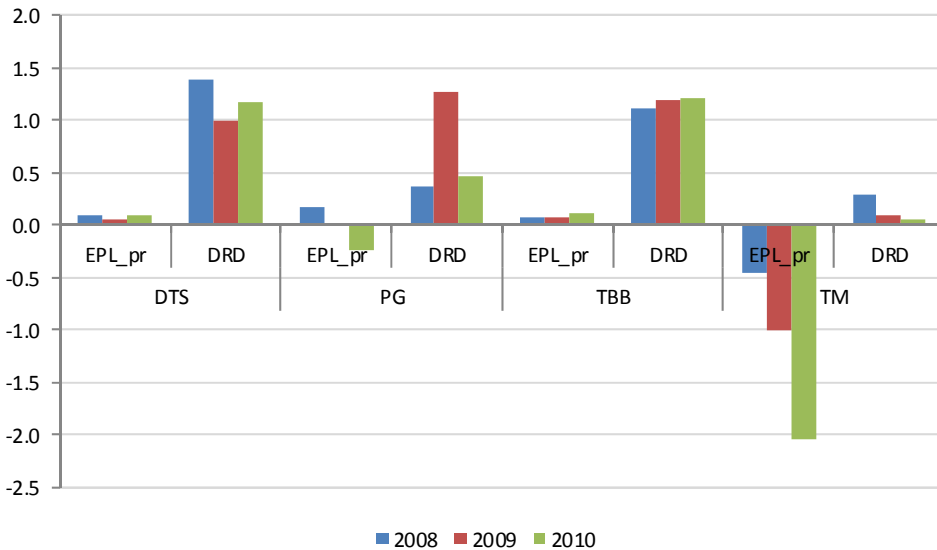


Figure 8.4 The Dutch net profit as a proportion of the value of fishing rights by fleet segment i.e. return on fishing rights (EPL\_pr) and value of fishing rights to value of tangible assets ratios by fleet (DRD)  
(Source: EU Member States DCF data submissions)

In the UK fleet, many segments have high fishing right values. Naturally, the value of fishing rights increases with the size of the vessel. On average the value of fishing rights is almost three times as high as the value of tangible assets. Profits varied significantly over the period analysed. Profitability in relation to value of rights depended on the value of rights. The average return on fishing rights was 20%.

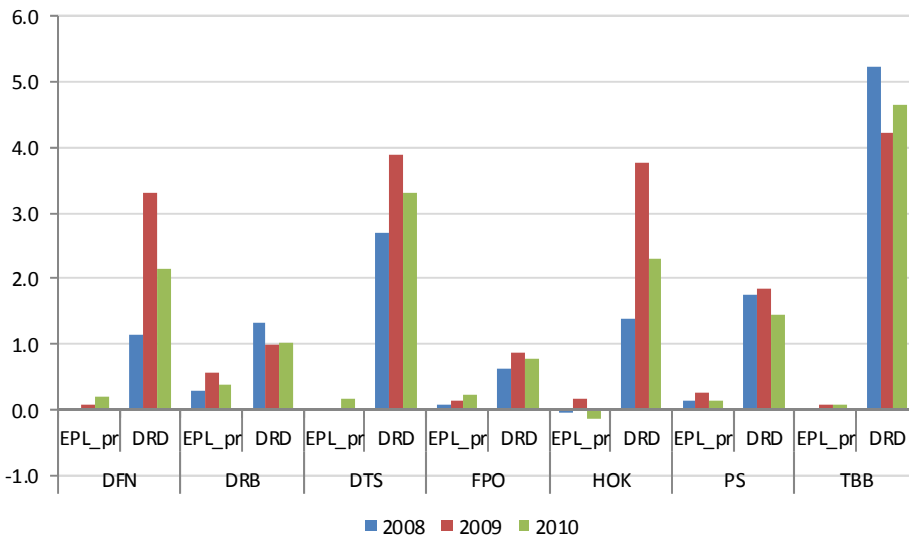


Figure 8.5 UK value of fishing rights to value of tangible assets ratios by fleet segment  
(Source: EU Member States DCF data submissions)

## 8.4 Trade of fishing rights: efficiency of market and distribution of profits/rents

Two aspects in trading with fishing rights are examined in the following section: (1) trade volume and market efficiency and (2) the redistribution of profits within the ITQ system.

### 8.4.1 Efficiency of fishing trade markets

The size of the market should reflect the efficiency of the fishing right market, which in turn relates to information on the efficiency of prices. If the markets are deep, this refers to efficient markets where the prices reflect all the information available, private and public, concerning the fishery in this case. If the markets are thin the information transmitted through prices are weak. In the case of strong markets we assume that the value of fishing rights reflects the real value of the resource. In the case of weak markets, this cannot be assumed.

For this, the net income from fishing rights was compared with the total rights value. This analysis was examined at the MS level to elaborate the efficiency of market.

Table 6 contains the percentage of trade in fishing rights in relation to the value of rights (EIR – ratio between income from leasing out fishing rights and total value of fishing rights; ECF EIR – ratio between expenditure on leasing in fishing rights and total value of fishing rights). Apart from one observation in Estonia, all ratios were low, between 1 and 2%. From this, we can conclude that the rights trade markets are thin, and hence, cannot confirm that the prices fully reflect the full (market) value of the resource.

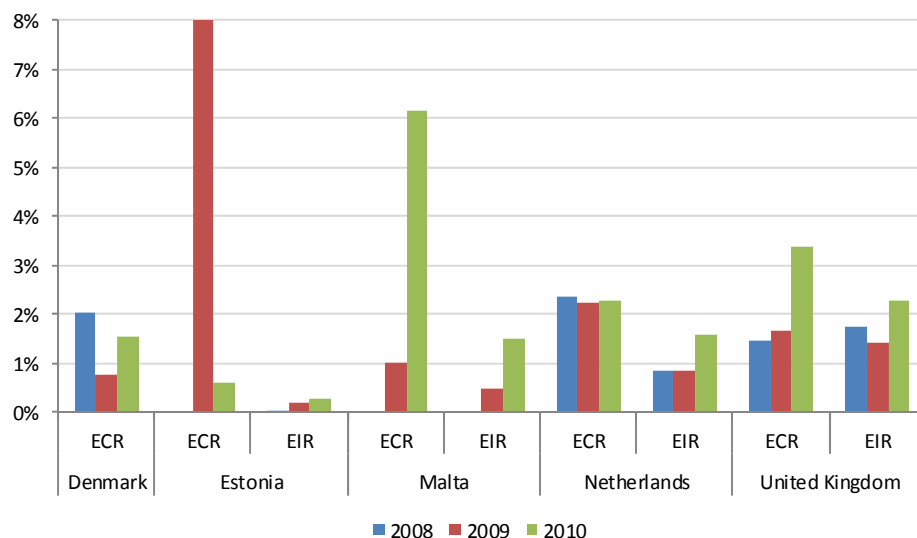


Figure 8.6 The volume of the trade in fishing rights  
(Source: EU Member States DCF data submissions)

### 8.4.2 Distribution of profits/rent

The other aspect of the analysis was to examine the distribution of profit created between fleet segments. Going further we can examine if rights trading follows the theory that the most efficient part of the fleet buys off the less profitable part. In this case, the more profitable fleet segments should have a net cost for leasing rights.

For this analysis, the profitability of the fishing fleets was compared to the net income from trading with fishing rights. According to the hypothesis, fleet segments that were net buyers should have been more profitable than the net sellers. This should produce a negatively sloped trend in the graph below.

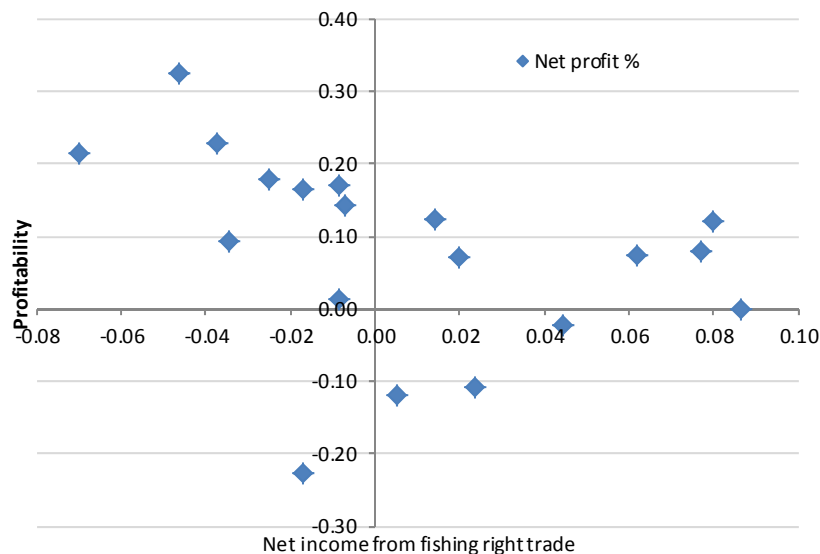


Figure 8.7 Profitability on the net income of fishing rights

(Source: EU Member States DCF data submissions)

The graph above presents the profitability on net income relative to value of fishing rights and reveals a mixed picture. However, there is a downward sloped trend (negative correlation) supporting the hypothesis of more profitable fleets are net buyers of fishing rights. Nonetheless, the data suggest that the level of trade and, hence, the rent redistribution is low.

Of note is that the data does not include the Danish and Swedish fleets. These countries introduced ITQs very recently and may, in the near future, provide further information to substantiate these results. Apart from Denmark and Sweden, fishing rights were introduced a long time ago and in those cases it is likely that adjustments occurred before the years in which our data relates. For these countries we would need a longer time series to observe the fleet developments. Unfortunately we do not have appropriate data to examine in detail the development after introducing the tradable rights.

### 8.4.3 Fleet dynamics: concentration of rights in time

ITQs should give incentives for more profitable vessels to buy out less efficient fleets. This should lead to concentration of the fleet, resulting in a smaller fleet in terms of number but more efficient

and profitable. To observe the development the analysis would require data for the period that the ITQs were introduced. Given the data availability, only a qualitative analysis was possible.

The ITQ system was introduced in Estonia in 2001. At that time, a total of 95 enterprises had historical rights to access quota. After ten years, the situation changed considerably and in 2011, only 30 enterprises had historical rights to a trawling quota (see Table 8.1).

Similar to the number of enterprises, the number of vessels also decreased significantly during this period. There were 189 vessels in the Estonian trawling sector in 2000, after ten years the number of vessels decreased to 46, less than a quarter of the initial number.

Table 8.1 Rights distribution in the Estonian fishing fleet

Historical fishing right holder size group	Number of enterprises		Share (%) in historical fishing right	
	2001	2011	2001	2011
> 3% of national quota	4	13	37.76	88.62
1–3% of national quota	23	5	38.67	8.72
0.1–1% of national quota	59	5	23.39	2.59
< 0.1% of national quota	9	7	0.18	0.07

In Sweden, the ITQ system was introduced in 2009. In 2010 the Swedish Board of Fisheries approved approximately 450 transfers including all or part of the allocated fishing rights between vessel license holders. This has led to the number of vessels with pelagic licenses on the 31 December 2010 amounting to 42 (a decrease of 39 vessels from the initial 81). On the 31 December 2011, this number equated to 36 vessels, 44 % of the initial number. Part of vessel capacity has been removed from the Swedish fleet by export or conversion of vessels to other than fishing vessels, but it is still too early to pronounce with certainty about how capacity on a long-term basis has been affected.

By reducing the number of pelagic vessels by more than half, the profitability of the pelagic fisheries has improved, all else being equal. However, it should be noted that the pelagic quotas, in essence, has declined in recent years, which may cause difficulties for those who invested in the purchase of additional fishing rights. This is, however, a company's own economic judgment as it is up to each company to make before the investment decisions are taken.

When vessel permit holders are entitled to a prescribed proportion of the quotas, it has also become possible to carry out individual quota exchanges with other EU countries. Previously, such changes were mainly made collectively for all fishing on a certain quota, but now a growing number of individual quota exchanges are made. In 2010, approximately 230 changes, mainly to Denmark, but also with other countries were carried out. This type of trading can help create opportunities to specialise in certain types fishing, as well as facilitate a more efficient planning of fishing activity.

In the Netherlands, the concentration of fishing rights stagnated since 2000 because of lack of money in the sector to buy out fishermen who stopped fishing. Prices of ITQ's decreased and many inactive fishermen are still holding their individual quota. These quotas are now for rent and prices for sole and plaice depend on the catchability of fish and market (auction) prices.

The total capacity of the UK harvesting fleet in the North Sea has decreased over the last two decades. The 2010 Scottish Fisheries Statistics reported that the number of active fishing vessels based in Scotland was 2,150 at 31 December 2010, the smallest fleet size every recorded. There

were 665 over 10m vessels, a 30% decrease since 2001. There has been a shift toward larger tonnage per vessel over the last 15 years.

Total recorded kW days at sea for the UK DTS over 10m fleet decreased from 78.7 million in 2001 to 42.7 million in 2010, a decrease of 46% over the time period analysed, the most significant decreased taking place between 2002-2004.

The total landed volume by the UK DTS over 10m fleet decreased from around 305 thousand tonnes in 1997 to around 155 thousand tonnes in 2011, a 49% decrease over the time period analysed. Landings decreased considerably following the two rounds of vessel decommissioning in 2001 and 2003. Quota units have been concentrated onto fewer vessels. Some well-financed vessel agents and integrated catching and processing companies are reported to have been accumulating large amounts of quota to lease to the vessels they represent.

## **8.5 Conclusions**

Although most EU Member states have right base management systems in place, only a few MS have introduced a TFC management system, whether ITQs or similar. These countries are: Denmark, Estonia, United Kingdom, Malta, Netherlands and Sweden. The Netherlands individual fishing rights management system was introduced almost 40 years ago. These evolved into the ITQ system with a well-defined market. The Estonian ITQ system was implemented around ten years ago. In Denmark, ITQ system for pelagic fisheries is almost ten years old but for demersal fisheries right based management started gradually in 2007. Maltese Bluefin tuna ITQ system was introduced 2009. The Swedish ITQ management system became functional in 2010.

The value of fishing rights has become a significant share of fishing companies capital. In many fleets segments where ITQs are important, the value of fishing rights is higher than the fleet's tangible asset value.

Evidently the value of fishing rights varies significantly between fleet segments. That is natural given that usually only part of the landings is species managed by ITQs. This fact also influences the return on fishing rights. Unfortunately, economic data on fishing rights values and trade was only available for the period 2008-2010. Therefore, due to the limited time series data available, it was not possible to fully assess the relationship between fishing rights value and fleet profitability. However in Sweden and Denmark where ITQ systems were introduced recently or have recently evolved, anecdotal evidence suggests that the profitability of fleet segments that hold the majority of rights within that Member State, for example the Danish demersal trawl, has improved significantly.

Our analysis shows that trade in fishing rights was low in terms of value. This suggests 'thin' markets where prices do not necessarily reflect the full market value of the resources. Low trade also signals insignificant redistribution of resource rent between fleet segments. Another characteristic observed of the fishing rights trade in EU fleet segments is that the majority of trade takes place in the over 12m sector.

Most Member States report a higher value for 'leasing in' fishing rights than for 'leasing out' fishing rights, indicating that fishing rights are leased from individuals and other entities outside the active fleet.

Furthermore, there was some evidence that the more efficient fleet segments were net purchasers of fishing rights, and that they were more profitable than the selling segments. On an annual basis it indicates that there is a rent re-distribution when the more efficient lease quotas from the less

productive vessels. This is the incentive of ITQ that leads, over the longer term, to capacity adjustment and a more profitable fleet.

We were not able to analyse the long term impact of ITQ because of the lack of data in DCF. However the fleet dynamics have followed the anticipated development, i.e. capacity has decreased. In Estonia the size of the fleet diminished down to one fourth in ten years. In the Swedish pelagic fishery, two years after introducing the ITQ system, fleet capacity more than halved. Anecdotal suggests that the introduction of the ITQ market successfully eliminated over-capacity within these fleets.

The analysis is limited due to lack of data availability. Most of the issues that are of interest require data since the ITQ system was introduced. Therefore we cannot answer the questions posed in cases where the ITQ system was introduced further back in time. For the fleets discussed, there is little doubt that ITQs have had a significant impact on fleet structure. The importance of ITQ species by fleet would be an important factor to consider in future analyses.

## **9. 2012 AER REPORT METHODOLOGY**

### **9.1 Introduction**

This year's fishing fleet economic data call was issued by DG MARE on the 9 February with a one month deadline (9 March 2012).




The tables below outline all the DCF economic and transversal variables to be submitted for the years 2008-2012, along with their uploading acronyms and corresponding aggregation levels. All the various definitions for variables, aggregation levels, gear types, length classes, DCF supra regions, FAO sub regions, species, sampling strategies and precision levels can be found by navigating through the data collection website.


See <https://datacollection.jrc.ec.europa.eu/home>

Table 9.1 AER 2012 Fleet economic data call contents for years 2008-2012

Table 6.2						
---	--	--	--	--	--	--



Data Type	Variable group	Example	Variable's Acronym	Years	Aggregation level	Other requested fields
Transversal	Capacity	 <a href="#">dcf Capacity.xls</a>	totVes	2008, 2009, 2010, 2011, 2012	Yearly by: 1. Fleet segment, <a href="#">Supra Region</a> 2. National totals	<a href="#">Sampling Strategy, Achieved Sample Rate, Coefficient of Variation (CV)</a>  (For national totals, only achieved sample rate is requested)
			avgLOA			
			totGT			
			totKw			
			avgAge			
	Effort	 <a href="#">dcf Effort.xls</a>	totSeaDays	2008, 2009, 2010, 2011	Yearly by: 1. Fleet segment, <a href="#">FAO Area level 4</a> (Baltic), <a href="#">FAO Area level 3</a> (all other regions) 2. National totals	
			totFishDays			
			totKwFishDays			
			totGTFishDays			
			totFishOpr	2008, 2009, 2010, 2011	Yearly by: 1. Fleet segment, <a href="#">Supra Region</a> 2. National totals	
			totTraps			
			totNets			
			IngNets			
			totHooks			
			totSoakTime			
			totTrips			
			totEnerCons	2008, 2009, 2010		
	Landings	 <a href="#">dcf Landings.xls</a>	totWghtLandg	2008, 2009, 2010, 2011	Yearly by: 1. Fleet segment, <a href="#">FAO Area level 4</a> (Baltic), <a href="#">FAO Area level 3</a> (all other regions) 2. National totals	
			totValLandg			

Data Type	Variable group	Example	Variable's Acronym	Years	Aggregation level	Other requested fields
<u>Recreational</u>	<u>Catches</u>	 <a href="#">dcf Rec Catch.xls</a>	totWghtCatch	2008, 2009, 2010, 2011	Yearly, Region level 2 (see <a href="#">Appendix II</a> )	<a href="#">Sampling Strategy, Achieved Sample Rate, Coefficient of Variation (CV)</a>  (For national totals, only achieved sample rate is requested)

## 9.2 Economic performance indicator calculations

From the data submitted by Member States, indicators were calculated in order to assess the economic performance of fleet segments, national fleets, regional fleets and the EU fleet as a whole. For economic performance calculations relating to the years 2008-2012, the following formulas were used:

### **Total Income:**

Total Income = Income from landings + income from fishing rights + other income + direct subsidies

### **Revenue:**

Revenue = Income from landings + other income

### **Gross Value Added (GVA):**

GVA = Income from landings + other income – energy costs – repair costs – other variable costs – non variable costs

### **Gross Profit (GRP):**

GRP = Income from landings + other income – crew costs – unpaid labour - energy costs – repair and maintenance costs – other variable costs – non variable costs

### **Net Profit/Loss:**

Net Profit = Income from landings + other income – crew costs – unpaid labour - energy costs – repair costs – other variable costs – non variable costs – depreciation cost – opportunity cost of capital

Where opportunity cost of capital = fixed tangible asset value \* real interest

Where real interest (r) =  $[(1 + i) / (1 + \pi)] - 1$ .

Where i is the nominal interest rate of the Member State in the year concerned and  $\pi$  is the inflation rate of the Member State in the year concerned. See table 11.3.

Note that direct subsidies have generally been excluded in the calculation of profit indicators throughout the report however in certain sections the profit calculation was conducted with and without direct subsidies for comparison (Net profit and Subsidised profit).

### **Rate of Return on Fixed Tangible Assets (ROFTA):**

ROFTA = net profit + opportunity cost of capital / tangible asset value (vessel depreciated replacement value)

**Break-even revenue (BER):**

$$\text{BER} = (\text{Fixed costs} + \text{opportunity costs of capital} + \text{depreciation}) / (1 - (\text{crew costs} + \text{unpaid labour} + \text{energy costs} + \text{repair and maintenance costs} + \text{other variable costs}) / \text{Revenue})$$

**Revenue to Break-even revenue Ratio (CR/BER):**

$$\text{CR/BER} = \text{revenue} / \text{break-even revenue} = \text{Income from landings} + \text{other income} / \text{BER}$$

Gives an indication of the short term profitability of the fleet/fleet segment (or over/under capitalised): if the ratio is greater than 1, then enough cash flow is generated to cover fixed costs (economically viable in the short term). If the ratio is less than 1, insufficient cash flow is generated to cover fixed costs (indicating that the segment is economically unviable in the short to mid-term).

Table 9.2 Inflations and nominal LT interest rates by EU Member State 2008-2010

Inflation					LT (nominal) Interest rate				
	2008	2009	2010	2011		2008	2009	2010	2011
Belgium	4.5	0	2.3	3.5	Belgium	4.4	3.9	3.5	4.2
Bulgaria	12	2.5	3	3.4	Bulgaria	5.4	7.2	6.0	5.4
Cyprus	4.4	0.2	2.6	3.5	Cyprus	4.6	4.6	4.6	5.8
Denmark	3.6	1.1	2.2	2.7	Denmark	4.3	3.6	2.9	2.7
Estonia	10.6	0.2	2.7	5.1	Estonia	8.2	8.0	6.0	
Finland	3.9	1.6	1.7	3.3	Finland	4.3	3.7	3.0	3.0
France	3.2	0.1	1.7	2.3	France	4.2	3.7	3.1	3.3
Germany	2.8	0.2	1.2	2.5	Germany	4.0	3.2	2.7	2.6
Greece	4.2	1.3	4.7	3.1	Greece	4.8	5.2	9.1	15.7
Ireland	3.1	-1.7	-1.6	1.2	Ireland	4.5	5.2	5.7	9.6
Italy	3.5	0.8	1.6	2.9	Italy	4.7	4.3	4.0	5.4
Latvia	15.3	3.3	-1.2	4.2	Latvia	6.4	12.4	10.3	5.9
Lithuania	11.1	4.2	1.2	4.1	Lithuania	5.6	14.0	5.6	5.2
Malta	4.7	1.8	2	2.4	Malta	4.8	4.5	4.2	4.5
Netherlands	2.2	1	0.9	2.5	Netherlands	4.2	3.7	3.0	3.0
Poland	4.2	4	2.7	3.9	Poland	6.1	6.1	5.8	6.0
Portugal	2.7	-0.9	1.4	3.6	Portugal	4.5	4.2	5.4	10.2
Romania	7.9	5.6	6.1	5.8	Romania	7.7	9.7	7.3	7.2
Slovenia	5.5	0.9	2.1	2.1	Slovenia	4.6	4.4	3.8	5.0
Spain	4.1	-0.2	2	3.1	Spain	4.4	4.0	4.3	5.4
Sweden	3.3	1.9	1.9	1.4	Sweden	3.9	3.3	2.9	2.6
United Kingdom	3.6	2.2	3.3	4.5	United Kingdom	4.5	3.4	3.4	3.0

### 9.3 Economic performance projections

For economic performance forecasts at fleet segment and national level, the following formulas were used:

Crew wages (CW) were estimated as an average proportion of the value of landing (VaL) during the three previous years:

$$CW_t = \frac{\sum_{i=1}^{t-3} CW}{\sum_{i=1}^{t-1} VaL} \times VaL_t$$

Non-variable costs (NVC) were estimated using the change in capacity i.e. number of vessels (N):

$$NVC_t = \frac{N_t}{N_{t-1}} \times NVC_{t-1}$$

Variable costs (VC) are projected using changes in effort, i.e. Days at Sea (DAS):

$$VC_t = \frac{DAS_t}{DAS_{t-1}} \times VC_{t-1}$$

The same method is to be applied on variable costs is applied at repair and maintenance.

Fuel costs (FC) are projected using changes in effort (DAS) and change in average fuel price (P):

$$FC_t = \frac{DAS_t}{DAS_{t-1}} \times \frac{P_t}{P_{t-1}} \times FC_{t-1}$$

## 10 EWG-12-05 LIST OF PARTICIPANTS

Name	Address	Telephone no.	Email
<b>STECF members</b>			
Loretta Malvarosa	IREPA Via San Leonardo Trav Migliaro 84100 Salerno Italy		<a href="mailto:malvarosa@irepa.org">malvarosa@irepa.org</a>
Arina Motova	European Regional Policy Institute, S. Konarskio str. 49, LT-03123 VILNIUS, Lithuania	Tel.+ 37 06 1219519 Fax + 3705 2030007	<a href="mailto:arina.motova@erpi.lt">arina.motova@erpi.lt</a>

Name	Address	Telephone no.	Email
<b>Invited experts</b>			
John Anderson (Chair)	Sea Fish Industry Authority 18 Logie Mill Logie Green Road Edinburgh Scotland, UK EH7 4HS	Tel.+44 131 524 8662	<a href="mailto:john_anderson@seafish.co.uk">john_anderson@seafish.co.uk</a>
Philip Rogers	Erinshore Economics UK		<a href="mailto:phil@erinecon.com">phil@erinecon.com</a>
Anton Paulrud	Swedish Agency for Marine and Water management	Tel.+46 10 698 6292	<a href="mailto:anton.paulrud@havochvatten.se">anton.paulrud@havochvatten.se</a>
Jorg Berkenhagen	VTI-Federal Research Institute for Rural Areas Palmaille 9 22767 Hamburg Germany	Tel. + 49 040 38905- 206	<a href="mailto:joerg.berkenhagen@vti.bund.de">joerg.berkenhagen@vti.bund.de</a>
Luisa Carvalho	Director Geral de Pescas e Aquicultura Avenida Brasilia 1440-030 Lisboa Portugal	Tel. + 35 121 3035707	<a href="mailto:lcavalho@dga.min-agricultura.pt">lcavalho@dga.min-agricultura.pt</a>
Irina Davidjuka	Fish Resources Research Department Daugavgrivas 8 LV-1048 Riga Latvia	Tel. + 37 037 397087	<a href="mailto:irina.davidjuka@bior.gov.lv">irina.davidjuka@bior.gov.lv</a>
Cecile Brigaudeau			<a href="mailto:cecile@desrequinsetdeshommes.org">cecile@desrequinsetdeshommes.org</a>
Edvardas Kaslauskas	Agri information and Rural Business Center V. Kudirkos str. 18 LT03105 Vilnius Lithuania	Tel. + 37 037 397087	<a href="mailto:edvardas.kaslauskas@vic.lt">edvardas.kaslauskas@vic.lt</a>
Emil Kuzebski	Morski Instytut Rybacki Kollataja 1 81-332 Gdynia Poland	Tel. + +48 735 6118	<a href="mailto:emil@mir.gdynia.pl">emil@mir.gdynia.pl</a>
Janek Lees	Estonian Marine Institute Mealuse Street 12618 Tallinn Estonia		<a href="mailto:janek.lees@ut.ee">janek.lees@ut.ee</a>
Maria Amelia Miguez	DG Pescas e Agricultura Av.Brasilia 1449-030 Lisboa Portugal	Tel. + 25 121 3035888	<a href="mailto:amiguez@dga.min-agricultura.pt">amiguez@dga.min-agricultura.pt</a>

Name	Address	Telephone no.	Email
<b>Invited experts</b>			
Arnaud Souffez	University Of Nantes Chemin de la Censive du Tertre 44322 Nantes France	Tel. + 33 240 141738	<a href="mailto:arnaud.souffez@univ-nantes.fr">arnaud.souffez@univ-nantes.fr</a>
Jacques Traguany	Direction Peches Maritimes Aquaculture - B.S.P.A. 3 place de Fontenoy 75007 Paris France	Tel. +33 149 558287	<a href="mailto:jacques.traguany@agriculture.gouv.fr">jacques.traguany@agriculture.gouv.fr</a>
Simon Mardle	Freelancer		<a href="mailto:simon.mardle@talk21.com">simon.mardle@talk21.com</a>
Simo Tikakoski			<a href="mailto:Simo.Tikakoski@rktl.fi">Simo.Tikakoski@rktl.fi</a>
CJM Verbogt (Kees)	Ministry of Economic Affairs, Agriculture and Innovation	+31(0)646064914	<a href="mailto:c.j.m.verbogt@mineleni.nl">c.j.m.verbogt@mineleni.nl</a>
Emmet Jackson	Bord Iascaigh Mhara (BIM) Irish Sea Fisheries Board	+353 (0)87 1954675	<a href="mailto:jackson@bim.ie">jackson@bim.ie</a>
Constantin Stroie			<a href="mailto:cststroie@yahoo.com">cststroie@yahoo.com</a>
Paolo Accadia			<a href="mailto:accadia@irepa.org">accadia@irepa.org</a>
<b>JRC Experts</b>			
Natacha Carvalho	Joint Research Centre (IPSC) Maritime Affairs Unit Via E. Fermi, 2749 21027 Ispra (Varese) Italy	Tel.+390332786713	<a href="mailto:natacha.carvalho@jrc.ec.europa.eu">natacha.carvalho@jrc.ec.europa.eu</a>
Jarno Virtanen	Joint Research Centre (IPSC) Maritime Affairs Unit Via E. Fermi, 2749 21027 Ispra (Varese) Italy	Tel.+390332789614	<a href="mailto:jarno.virtanen@jrc.ec.europa.eu">jarno.virtanen@jrc.ec.europa.eu</a>
Franca Contini	Joint Research Centre (IPSC) Maritime Affairs Unit Via E. Fermi, 2749 21027 Ispra (Varese) Italy	Tel.+390332785646	<a href="mailto:franca.contini@jrc.ec.europa.eu">franca.contini@jrc.ec.europa.eu</a>
Antonella Zanzi	Joint Research Centre (IPSC) Maritime Affairs Unit Via E. Fermi, 2749 21027 Ispra (Varese) Italy	Tel.+390332785646	<a href="mailto:antonella.zanzi@jrc.ec.europa.eu">antonella.zanzi@jrc.ec.europa.eu</a>

Name	Address	Telephone no.	Email
<b>European Commission</b>			
Angel Calvo	DG Maritime Affairs and Fisheries		<a href="mailto:angel-andres.calvo-santos@ec.europa.eu">angel-andres.calvo-santos@ec.europa.eu</a>
Marousa Vasilaki	Joint Research Centre (IPSC) Maritime Affairs Unit Via E. Fermi, 2749 21027 Ispra (Varese) Italy		<a href="mailto:Marousa.VASILAKI@ec.europa.eu">Marousa.VASILAKI@ec.europa.eu</a>

## 11 LIST OF BACKGROUND DOCUMENTS

- Summary of the 2012 Annual Economic Report on the EU Fishing Fleet (eds. Anderson J. & Carvalho N.). 2012. Publications Office of the European Union, Luxembourg, EUR 25425 EN, JRC73372, 17 pp.

European Commission

EUR 25452 EN – Joint Research Centre – Institute for the Protection and Security of the Citizen

Title: Scientific, Technical and Economic Committee for Fisheries. 2012 Annual Economic Report on the EU fishing fleet (STECF-12-10).

EWG-12-05 members: Anderson, J, Accadia, P., R., Berkenhagen, J., Brigaudeau, C., Carvalho, L., Carvalho, N., Davidjuka, I., Jackson, E., Kaslauskas, E., Kuzebski, E., Lees, J., Mardle, S., Miguez, M., Motova, A., Paulrud, A., Rogers, P., Souffez, A., Stroie, C., Traguany, J., Tikakoski, S., Verbogt, C., Virtanen, J.

STECF members: Casey, J., Abella, J. A., Andersen, J., Bailey, N., Bertignac, M., Cardinale, M., Curtis, H., Daskalov, G., Delaney, A., Döring, R., Garcia Rodriguez, M., Gascuel, D., Graham, N., Gustavsson, T., Jennings, S., Kenny, A., Kirkegaard, E., Kraak, S., Kuikka, S., Malvarosa, L., Martin, P., Motova, A., Murua, H., Nord, J., Nowakowski, P., Prellezo, R., Sala, A., Scarcella, G., Simmonds, J., Somarakis, S., Stransky, C., Theret, F., Ulrich, C., Vanhee, W. & Van Oostenbrugge, H.

Luxembourg: Publications Office of the European Union

2012 – 380 pp. – 21 x 29.7 cm

EUR – Scientific and Technical Research series – ISSN 1831-9424

ISBN 978-92-79-25760-5

doi:10.2788/40549

## Abstract

The 2012 Annual Economic Report (AER) on the European Union (EU) fishing fleet provides a comprehensive overview of the latest information available on the structure and economic performance of EU Member States fishing fleets. The results indicate that the EU fishing fleet moved from a loss making position to post a profit in 2010. On the whole, the EU fleet showed improvements in the economic performance indicators analysed when compared to 2009: GVA was estimated at €3.4 billion, an increase of 5.7%; gross profit was €1.2 billion, a 39.5% increase and net profit was €288 million, an increase of over €300 million from 2009 (all excluding subsidies). Forecast figures also indicate that the fleet's economic performance improved in 2011 for around three quarters of the national fleets analysed, yet in the current economic climate, the future of many EU fleets remain uncertain. This year's publication includes: (1) an economic and structural overview of the EU fishing fleet; (2) a detailed economic and structural overview of the fishing fleets from each EU Member State; (3) qualitative economic performance assessments for 2011 and 2012 for each EU Member State; (4) detailed economic and structural analyses of Member States key fleet segments; (5) regional analyses of the EU fishing fleet; (6) EU fish prices analysis; (7) economic indicators for assessing balance between fleet capacity and fishing opportunities and (8) analyses of DCF data relating to fishing rights.





#### How to obtain EU publications

Our priced publications are available from EU Bookshop (<http://bookshop.europa.eu>), where you can place an order with the sales agent of your choice.

The Publications Office has a worldwide network of sales agents. You can obtain their contact details by sending a fax to (352) 29 29-42758.

As the Commission's in-house science service, the Joint Research Centre's mission is to provide EU policies with independent, evidence-based scientific and technical support throughout the whole policy cycle.

Working in close cooperation with policy Directorates-General, the JRC addresses key societal challenges while stimulating innovation through developing new standards, methods and tools, and sharing and transferring its know-how to the Member States and international community.

Key policy areas include: environment and climate change; energy and transport; agriculture and food security; health and consumer protection; information society and digital agenda; safety and security including nuclear; all supported through a cross-cutting and multi-disciplinary approach.

---

The Scientific, Technical and Economic Committee for Fisheries (STECF) has been established by the European Commission. The STECF is being consulted at regular intervals on matters pertaining to the conservation and management of living aquatic resources, including biological, economic, environmental, social and technical considerations.